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PERSONAL CONTRIBUTION TO THE TREATMENT OF SOME FRACTURES AS THE RESULT OF LONG YEARS OF STUDY AND RESEARCH*

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NEW ORLEANS.

Most of us, especially in the beginning of our practice, are governed by the experience of older practitioners as recorded by them, either by word or in print. It requires a little courage to stray from the beaten path, and for this reason it was a long time before any progress was made in the treatment of fractures. Open reduction was seldom attempted even after the advent of roentgenograms, largely I believe, because there were so few who were mechanically inclined or gifted with any originality.

Although working in this field for years and departing in many ways from the teachings of older surgeons, the results of my work can be summarized in a few short pages. I shall not detain you with abstracts of the work of others, nor give you a detail of my failures, but rather relate the results of my researches and demonstrate as briefly as possible my successes.

My first work in this field was in the wards of the Charity Hospital from 1889-1891. The treatment of fractures in those days was crude and consisted almost entirely of the use of Buck's extension, seldom used effectively, and plaster of paris bandages. Compound fractures up to that time were rarely treated, as amputation was the usual procedure.

In 1891 a youth, eighteen years of age, was admitted to our service in the Charity Hospital. He was suffering from a compound fracture of the femur, just above the condyle. His leg had been run over by a float. Asceptic surgery had just been introduced in the ward by Dr. Parham. The prescribed procedure in cleansing the wound and dressing it with sterile gauze was carried out and a temporary splint applied to relieve pain until the leg could be amputated, as infection usually followed with a high mortality (70 per cent). His condition was so good next day that I persuaded the house surgeon to turn the case over to Dr. Parham, who could amputate if necessary. Three months later the boy left the hospital with a perfectly sound leg, the first compound fracture on record leaving the institution with a good leg. This marked an epoch in the treatment of compound fractures, and with this came the necessity for devising means of handling these cases. This was done by the use of fenestrated tin splints and bracket splints, made of plaster, so that the wound could be exposed and dressed without manipulating the limb.

We now realized that there was a great field in the treatment of fractures and both of us devoted much time to this work. Few were the devices used. The Liston splint for femur fractures, as well as plaster bandages, usually gave functional results but with great deformity and much shortening. The Hodgen's splint which was popular-

*Read before the Orleans Parish Medical Society, April 25, 1932.

ized about that time by Dr. Mudd of St. Louis, was adopted by us and after learning how to adjust it, our results were far better in fractures of the long bones of the leg and the patients much more comfortable.

Another important observation was the fact that the cases which could be treated without immobilizing the joints were comfortable and their convalescence more rapid. The Hodgen's splint helped materially in fractures of the leg, as none of the joints were fully immobilized and traction prevented the overlapping of the fragments.

This was the beginning of traction treatment, which today has reached a point of great perfection in the Russell splint, which, however, is understood by few. Most surgeons were satisfied with a good functional result, deformity being the rule rather than the exception. The treatment through convalescence was far more painful than the injury itself.

KNEE

It was due to this condition, and especially in the knee joint, where ankylosis frequently followed fractures of the patella, that fractures recurred when first attempting to mobilize the joint. Several years were spent in working out a technic, with which many of you are familiar and which entirely prevented ankylosis, not only allowed the patient to get about on crutches in two weeks, but returned him to his occupation in six weeks, suffering no pain and discomfort during convalescence. This I consider a wonderful advance in the treatment of fractures of the patella. It was noticed that all fractures of the patella treated by simple suture left a deformity due to stretching of the fibers between the fragments, which affected the usefulness of the limb. In studying the knee joint from the skiagrams, it was seen that the patella rested on its center only, acting as a fulcrum, and the ends which are attached to the ligament and tendon, did not come in contact with the condyle. There was a reason for this: when the quadraceps pulled on the proximal end, it caused the distal end to tip upward, starting the motion of the leg forward. It was evident, therefore, that the continuity of the patella must be preserved to make the joint function properly. The bony surfaces must be kept in apposition an indefinite period of time, six months at least, to secure osseous union (as the patella is a sessamoid bone and ossification slow) and at the same time the joint must be mobilized in order to prevent ankylosis. After many failures, success came by procuring a wire (annealed iron wire, No. 19) strong enough to hold the fragments for the required time, and so placed as to retain the bony surfaces in perfect and close apposition and allow free movement of the patella. No other method will do this and by such simple technic.

LONG SCREWS

It was about this time that surgeons begun to use the open method for the treatment of fractures. Arbuthnot Lane was treating all of his cases, both compound and simple fractures, by the application of plates held by machine screws. In his hands the treatment was most successful but with his followers, and there were many, the results were often disastrous, as a plate improperly applied caused necrosis and the screws loosening from the bone, acted as foreign bodies. These could be applied by few, as their experience and training was not such as to guide them in adjusting the plates snugly and firmly to the bone. Once the screw became loose it was a menace and sooner or later would give rise to necrosis, osteomyelitis and superficial abscesses, necessitating the removal of the screws and plates and the operation was condemned and fell into disuse to a great extent. Realizing that if the cause could be removed it would be an advance in this branch of surgery, a means must be devised which would be fool-proof and at the same time accomplish the desired end. This was furnished by the introduction of long carpenter screws which are being pretty generally used today, allowing the shank to turn freely on the proximal side but being fixed in the distal side where they hold firmly and

only when the ends of a fracture can be held in perfect and firm apposition until ossification is assured, can success be attained. This was not the work of a day, the result speaks for itself.

PLATES AND BANDS

On one of his visits East, Dr. Parham conceived the idea of making a band to hold the bones of oblique fractures in position and at his suggestion, I delivered the Parham-Martin band, which in properly suited cases has given excellent results.

Another observation was to the effect that in exposing the shaft of the bone for the application of the bands and plates, cases in which little trauma was done, exposing only as much of the bone as was absolutely necessary to place the ends in apposition and to allow the application of the plate, infection rarely followed. Since replacing the short screw with the long, I have had to remove the plate but once and this was due to poor judgment in operating before an old infection had cleared up. This case, however, held the ends in apposition long enough to get the desired result and the patient was no worse for it.

HIP

Fractures of the neck of the femur seemed one of the greatest problems to be solved. Royal Whitman's technic which was just beginning to become popular gave the best results, but these results were expensive to the patient in point of discomfort, especially as few surgeons could apply a snug fitting cast. This fact, added to the suffering caused by our long summers, resulted in annoying complications. To succeed, the fractured surfaces must be kept in apposition. No method thus far accomplished the desired end without the use of plaster. Few surgeons seemed to have the courage to give it up. Bone pegs, nails and fixation devices were numerous. In my opinion, the Royal Whitman method was the best thus far suggested, but this was not only uncomfortable, but in nearly all cases there was absorbtion of the neck and the patient left with a limp and limited motion. Perhaps it was due to the pressure on the head and neck which interferred with the circulation. Thoroughly convinced that when the fractured bones could be fixed and held in position without fixing the limb, circulation was less apt to be interferred with and atrophy of the muscles was less likely to occur. Introduction of one screw or nail through the trochanter helped hold the fragments in apposition and the plaster bandages kept it from slipping. This was in reality fixing the trochanter to or against the head. Would it not be better to fix the head to the trochanter? If this could be accomplished in such a way as to allow the head free movement in the acetabulum, and yet firmly attached to the trochanter, would it not be a distinct advance in the treatment of these troublesome cases, especially in the aged? I had already learned the value of carpenter screws. If they could be used in long bones by screwing them into the distal side of the bone, why not consider the head as the distal side? It worked. Many of you are familiar with this method. It has succeeded beyond my expectations.

PELVIS

For years it was thought fractures of the pelvis had to be treated in plaster casts, and still is by many. I reiterate that all that is necessary in the treatment of any fracture is fixation. The majority of these fractures are confined to the pubic bones and are never displaced beyond that point caused by the injury. Why then add to the distress of the patients by placing a restriction about their bodies? I found by actual experimentation in seven cases in the past four years, that these needed only rest in the prone position, but they could be made more comfortable by the application of a specially constructed belt and allowed to get on their feet in a very short period of time. Even complicated fractures of the pelvis could be treated by the same method and if deformity existed, such as fracture through the acetabulum, they could be corrected by the addition of traction. The surgeon who applies a plaster cast for the

treatment of fracture of the pelvis today, owes his patient an apology.

VERTEBRAE

Fractures of the vertebrae were locked as firmly as possible in a plaster jacket. The discomfort arising from this form of torture was almost as unbearable as the pain produced by the injury. Immobilization is the only essential. While doing laminectomies, I learned that the ligaments which held the vertebrae in position were tough and unyielding and could, I believe, be depended upon to hold all vertebral fractures in position, no matter what the cause. Especially is this true if the fracture is due to direct trauma, only severe enough to fracture the vertebrae, regardless of the character of the fracture. Rest in a prone position is all that is required. I had believed this for quite a while. Not until two years ago could I prove my contention. It was about this time that a blind man was struck by a street car. The eighth dorsal vertebra was fractured, without displacement. He refused to go to the hospital. It was no case for home treatment in a plaster jacket, as his wife was also blind, not like those who have eyes but cannot see, rather of the class who are blind but try to see. This man lay on his back four weeks, when he returned to his labors, free of pain and in better shape than any I had treated in a cast. His whole body was bathed daily and his back rubbed. I am glad to see some of our surgeons are now resorting to this method.

In bringing to your attention the results of my work, I am reminded of an expression used by Dr. Royal Whitman. He says, "A new treatment must be tested by novices and the results attained in inexperienced hands furnish the strongest evidence of its practicability and effectiveness." With few exceptions, the majority of these operations have been done by the younger surgeons and with the most satisfactory results. Uncomplicated fractures of the vertebral column, as well as those of the pelvis, in my opinion, can best be treated on a Bradford frame, with more comfort to the patient, less atrophy of the muscles, shorter convalescence and as good, if not with better results.

My technic in the treatment of fractures of the patella is being quite extensively used, not only here but by others throughout the country and I feel certain when the results are compared with others in use, deserves at least a trial. Many working independently have arrived at the same conclusions, especially in treatment of fractures of the pelvis. It simply means that today the treatment of fractures has come into its own and is recognized as one of the most important branches of surgery. This is easily accounted for. We live in an age of industry, surrounded by every device capable of producing trauma of every description.

I have made no mention of the use of the many devices suggested for the treatment of fractures, nor have I said aught about bone pegs and bone plates. I was thoroughly familiar with every device and used many of them. None of them, however, hold the fragments firmly without the addition of splints, and when loose act as foreign bodies. It was on reports based on results of cases treated with such appliances that the open method was criticized so severely. Bone pegs have their place but are often used in the hope that though they loosen before union takes place, they will eventually be absorbed.

Gentlemen, I am as firm in my convictions regarding my results as was Lord Bacon when asked if a chicken could be preserved in snow. Like the good jurist that he was, he pled for time. At the end of some weeks he replied that it could. When asked how he knew, he answered that he had buried the chicken in the snow.

Every one of my experiments were tried, not once but many times; nor was the goal reached without failures, but each failure brought me nearer, even beyond my expectations, until today I feel justified in presenting them for your consideration.

In concluding, let me warn the inexperienced of the impossibility of learning to

treat fractures from text books, which pay too much attention to the anatomy and too little to treatment. Experience gained by personal contact is the only means of mastering the subject. Remember, you learn most by failures and authors are not given to publishing their mistakes.

SUMMARY

1. Introduction of long screws.
2. Use of annealed iron wire in treatment of fractures.
3. Operation for treatment of fracture of patella, preventing ankylosis of joint and shortening time of convalescence and preventing refracture.
4. Operation for fracture of neck of femur, doing away with any external fixation and restoring patients to normal condition in suitable cases, with shortened convalescence.
5. Introduction of band to be used in oblique fractures of long bones (known as Parham-Martin band).
6. Bandage for treatment of pelvic fractures.
7. Suggestion for treatment of spinal fractures without the use of plaster.

DISCUSSION

Dr. King: Dr. Martin's remarks about the work he has done represents a tremendous amount of effort, a tremendous amount of tnought, a tremendous amount of patience. They also represent a peculiar type of mechanical skill which few of us possess. Having watched him work for a good many years, I am in position to know. He has been a pioneer with this type of work in New Orleans, and I believe that the profession in this city, state, and the South owes him a debt of gratitude which it will never be able to pay. I have often thought that a rose to the living is better than many wreaths to the dead, hence I fling a little bouquet where it belongs.

This work is not easy. When Lane first began his bone operations, he was afraid, because of the criticism that his early results were not entirely satisfactory. Lane was probably a pioneer in this particular kind of work. Murphy, of Chicago, did wonderful work along this line and a good many of you are following his precepts today. However, we have gotten away from one point on which Murphy laid particular stress—he laid down a law never to do a bone operation under from a week to 10 or 12 days. His reason was that after trauma a lacerated muscle is more liable to infection in the first few days than it is after this period has elapsed. We know that the peritoneum will stand a certain amount of trauma, it will take care of itself in the presence of infection, whereas muscle will not. But we have learned this—if we follow out this thing that Murphy calls "superlative asepsis" we may go ahead and operate early in the game with the assurance that there will be no infection. We have never been able to do a knife and fork operation. It is impossible. You have got to get the fingers in the wound sometimes, but we find that, after you have finished, no matter how careful you have been, you should flood your field with ether. It helps in some way to prevent infection.

Murphy also laid down another law. In order to secure good bony union, you must have good bony contact. A moment ago, you saw a slide of a patella which had not been sutured or wired, it was held in the center by a little band of fiber. If you have ever opened a joint and observed the wound with its lacerated capsule, dipping down into the joint, you will readily understand why this peculiar condition occurs and why it is almost impossible to pull the fractured bones together with anything but some mechanical device. An old method was to use the figure of eight bandange; it is now out of date and rarely ever used. In fractures of the long bones, particularly fractures of the femur, the old Liston splint was used. Hodgins made an effort to get away from that sort of thing when he invented his splint; so did Braun when he invented his apparatus to keep the patient's leg off the bed.

We are constantly reaching out for better methods to get better results. Even today, with all of our up-to-date apparatus and methods, we do the best we can and yet sometimes we fail in obtaining absolutely perfect anatomic and functional results. It is always necessary to get perfect anatomic apposition of the bone, but the man who takes pride in his work will try for both good apposition and good functional result.

Do not go into this with the eyes shut. You must possess mechanical talent. We have all seen a man who, supposedly knew all about abdominal conditions, open the abdomen and get into trouble. The same is true in goiter—we all get into trouble. Any man who is going to take up this sort of work should prepare himself beforehand. I know a young man who decided to take up dentistry. The first thing he did was to find himself a job in a locksmith's shop in order to perfect his mechanical talent. This is good common horse sense. He knew if he tried to practice dentistry without knowing about the mechanical features he would be a failure. If some of our men today would find themselves jobs in shops, and improve their technique, their

results in this particular type of work would be far better than it is.

I personally wish to thank Dr. Martin for this explanation. I have been associated with him and know the trials and tribulations he has had. I have heard him cursed behind his back and criticized, but so far as I am able to notice, his results, his methods are as good as anybody else's. A little posy now and then where it belongs does no harm.

Dr. McIlhenny: I want to thank Dr. Martin for his demonstration. I have been associated with him for some 25 years and, having come in contact with his patients when one of us was sick or away on vacation, I have become accustomed to some of his peculiarities and understand him; but I have not yet become accustomed to the many surprises that he constantly shows in his mechanical ability. Dr. King stole some of my remarks when he said that Dr. Martin was remarkable in his mechanical ability, but he only phrased it in milder terms. I think he is something more than remarkable. He is constantly seeking for simpler methods to solve complicated problems.

I wish to confine my remarks to special fractures of the patella and of the neck of the femur. I think you can boil it down to a simplification of the combined methods plus the introduction of genius, as shown by Dr. Martin's use of the annealed iron wire. First, he realized that silver wire was not sufficient in strength to withstand the pull of the quadriceps tendon; as he stated, the union was only as strong as the material used in holding the bony fragments in apposition. Then, seeking for a simpler method, he found a simple wire which would hold adequately and not produce trouble. He finally developed a method of holding the bone in apposition and by the function of the quadriceps the bones would hold in further apposition. The great point, to my mind, is not the suture of the patella with annealed iron wire—it is the simplicity with which the method can be used.

And a further and a greater point is the duration of time. It is only necessary for partial immobilization of the limb and, as Dr. Martin stated, the patients may be discharged from the hospital and function allowed as soon as the wound has healed. He has shown here from time to time, numerous cases one a brother physician who was operated on, not by Dr. Martin but by another surgeon in New Orleans. He was able, only about six months after his extensive fracture of the patella to show us one of the most beautiful demonstrations I have ever seen in proving that this simple method is the most applicable and common sense one that can be used.

With regard to fractures of the hip, Dr. Martin has dwelt on the point of drawing the smaller fragments down to the larger. I do not know that that point is realized and appreciated—the fact that you can draw the smaller fragment to the larger fragment instead of trying to force the larger fragment up is a very decided mechanical point.

As Dr. Martin has demonstrated, this method can be done under a local, it can be used in the aged, it does require very possibly a most minute mechanical sense, but it is done in a short time and through a comparatively short incision, it will allow the patient to be up in 24 hours, it will allow him to move around in bed without the necessity of support (in spite of the fact that some of us do like to use plaster of Paris), it obviates the necessity of maintenance in bed for any length of time, and lessens the danger of complications. I think this method is applicable in a great many cases of fractures of the neck of the femur.

A student asked me which was the best method of treating fractures. I told him I did not know of any best method, but that in my experience the simplest method, no matter what the fracture, depending on where the fracture is, is the best. Dr. Martin, in summing up his work, demonstrates beyond the shadow of a doubt that he is for the simpler methods of treating fractures.

Dr. Fenner: I am a classmate of Dr. Martin's, as an interne at the Charity Hospital, I had the privilege of serving as an interne in Dr. Parham's wards the first year. Dr. Martin he was my senior by one year, and I served as his assistant. I had the privilege of witnessing the desperate struggle Dr. Parham had to introduce aseptic surgery and of seeing his triumph.

The paper Dr. Martin has read to us is an extremely interesting one. I do believe that in fractures of the patella it can be truly said that the best method of treatment is the method of using the annealed wire loop, which has been devised by Dr. Martin. I have no doubt in my mind that no other suture method compares with it in meeting the mechanical problem, in releasing the patient far sooner than any other method, and in giving really permanent and solid union. How many of you noticed the practical, sound, common-sense remark Dr. Martin made about the incision across the knee? Just consult your textbooks on the surgery of the bones and joints and on operative surgery of the knee and try and find any author who recommends the transverse incision across the middle of the patella. Everyone advises a U incision, but all you have to do is what Dr. Martin suggested—draw a pencil mark across your knee following the U incision and see what you kneel on. Make the incision he rec-

ommends, and it will be entirely out of the line of pressure.

In fractures of the hip, for the last 10 years it has been my misfortune to have a roomfull of old, decrepit women with fractures of the neck of the femur. I will admit my results are still just about as discouraging to me as any work I have ever done in my life. It is not because I am a damned fool, not because I have not the experience, not because I do not give them the best care I know how to give. I have tried every method of treatment that has been recommended. I confess that none of them have given thoroughly satisfactory results with the exception of some cases treated by Whitman's method in which I had young, fairly vigorous and tolerably phlegmatic subjects, and in those I have obtained good functional results, as good as in the two whom Dr. Martin exhibited here tonight on whom he had used his screw fixation. But Dr. Martin has a mechanical efficiency which I have not. I got those screws in just as perfectly in alignment as he does, in some of my cases. Every now and then I would have a roentgenogram made and find that one of the screws had passed outside of the neck of the femur. Another will have run up and jammed the acetabulum and then I will have to take the screws out. Some did what one of his films showed. I thought I had the screws set fine and tight but a film made two days afterwards showed that the head of the screw was sticking out half an inch.

This method of fixation is applicable in cases that just do not do by any of the ordinary methods. I had the privilege of introducing the Hamilton-Russell method of compound traction in treatment of fractures of the femur at any level at Charity Hospital, after reading Hamilton-Russell's articles, and it has been adopted in all fracture wards. It does nicely in a great many cases. It is certainly far more comfortable on patients than a good many other methods, but it does not work on fractures of the neck of the femur. Whitman's abduction method of jamming the broken bone surfaces together and getting good apposition does splendidly. An attendant in the genito-urinary examination rooms suffeder a typical fracture of the neck of the femur, and was treated with the Whitman abduction method, and nobody could tell she has had a broken hip. A great many cases like that, on which a weight and pulley have been put, are left lame for life.

I have put a good many screws in broken femurs. I put them in one patient who got along beautifully, who had no pain and was wonderfully comfortable during her convalescence. After her discharge, she had been walking around for six months, when she fell down and broke the screws. Then I tried to take the screws out and remove the head of the femur, but she had been well for six months and walked fine. One or two others have been restored for useful lives by the use of screws. Others we have kept in bed for three months, they have got up, the screws have held and the trochanters have healed up, but the patient is lamed for life.

Every now and then we get a case such as I have had today. A frail old woman of 90 years fell down and broke her hip. I knew if I put her in the Whitman abduction plaster she would be dead in two weeks. If I put her in Hamilton-Russell traction, she would develop pneumonia. Under local anesthesia, I introduced a couple of long wood screws according to Dr. Martin's method. I did not put anything on her, but put her back in bed. She has not a perfect hip, but she is lying there comfortably and is not suffering any pain. Except for the treatment that Dr. Martin has devised, we would not have been able to do this for her.

These methods which Dr. Martin has proposed to you are practical. They are comparatively simple. They are based on sound thought, and even if we are not able to do these procedures as well as Dr. Martin, we have reason to be grateful to him for showing us that this kind of thought produces sound, practical results. I personally am grateful to have heard his paper and to have had the privilege of living alongside of him and of seeing the splendid work he has produced out of his capacity to really think.

Dr. Martin (closing): I regret that you did not discuss the treatment of fractures more in detail. However, I am grateful for your interest and especially for your encouraging remarks regarding my efforts.

Dr. Fenner has the happy faculty of filling in the gaps and emphasizing defects.

Of the two cases presented tonight, one was treated by me, one by a younger member of the profession; these as you saw gave excellent results, showing that strict adherence to the technic is all that is required, experience is a great help but not necessary. The method is not one applicable to every case, there are many conditions to be considered. In suitable cases, that is, those in which the fractured surfaces can be apposed, failure is rare. In one case, that of a woman 82 years of age, an attempt was made to use screws, but the bone was so fragile that the screws would not hold; this was an oblique fracture through the trochanter, running from the lesser trochanter upwards. Annealed iron wire No. 18 was applied with excellent results.

Fourteen cases ranging from 70 to 84 years of age were treated with local analgesia. These could not be treated by traction as adhesive plas-

ter either did not hold or infection of the skin resulted. There was no difficulty in introducing the screws in these and all the patients were made comfortable the balance of their lives. Though bony union is not expected in these cases, one case reported by Dr. Faust, aged 79, was successful. A case of Dr. King had no trouble for four years, although she fell on her hip several times, later developing a slight limp. A check-up showed a softening of the head with absorption but the site of fracture was united and in excellent position. Never do this operation unless in a hospital where a check-up with the roentgen ray can be made. Every precaution should be taken to prevent infection; so far not a single case has been reported.

You can place absolute confidence in the long wood (carpenter) screws. In one of our cases a plate was applied at the base of the trochanter, after the woman's death two weeks later a check-up was made and it was found that though the plate had broken, the four screws were holding the upper and lower halves in perfect position. The plate was broken in moving the body from the morgue to the roentgen ray department.

My first patella operation was done with silver wire thirty-two years ago. The wire held sufficiently long to secure bony union, but for some reason broke and the result was discouraging. The discovery of annealed iron wire filled a long felt want and after the introduction into this work of the annealed wire (No. 18) the results were all that could be desired. The patella is a sessamoid bone and union is slow, requiring from four to six months and the material used must therefore be permanent or at least of six months duration, no absorbale material will last this long and no strain can be put upon it for this length of time. The great number of cases reported show conclusively that wire when properly applied is not in any way objectionable, some of these cases having been operated upon as much as thirty years ago, and in no instance has it had to be removed. I do not believe that bony union can be shown in any case in which absorbable sutures are used, I have never seen one, although the results are apparently perfect.

I want to thank my friends for their cooperation in this work. I believe I have made a sufficient number of converts to assure its continuance and success. I thank you sincerely for your kind reception of my years of effort. It has been more than forty years since I first came before you with this subject and as it may be my last appearance, I am happy in the thought that I am able to present for your consideration something worthwhile.

ALLERGY*

EDLEY H. JONES, M. D.

VICKSBURG, MISS.

A chairman's address should present some original work, discuss some subject in the manner of one presenting the last word, or serve as a review or an editorial. Not having done the first and feeling incapable of the second, this address will be a brief editorial dedicated to the subject of allergy as it affects our profession, our specialty and our patients.

A few years ago workers in allergic fields had not even agreed on terminology. Allergy, atophy, hypersensitiveness, anaphylaxis, idiosyncrasy, etc., were all used interchangeably but in late years Von Pirquet's definition of allergy appears to have been accepted. Even now the limitations of the field may not be known. Few medical schools recogize it to the extent of including it in their curricula. Yet allergic conditions and influences have been found in practically every medical and surgical field and particularly in ours.

Hay fever, seasonal and perennial, and pollen asthma are easily understood and can usually be quickly diagnosed and benefited by treatment. But when ingestion of certain foods by sensitive individuals give rise to a great variety of symptoms ranging from mild skin conditions through vasomotor rhinitis, asthma, excessive urination, and migraine to acute enteritis simulating acute appendicitis, it is apparent that allergy is a field of great importance.

Early statistics estimated that 4 per cent of our population had allergic symptoms. Later statistics estimate 7 per cent and some allergists now estimate 10 per cent. Other statistics state that approximately 80 per cent of all allergic subjects have a positive family history.

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*Chairman's Address, read before the Section on Eye, Ear, Nose and Throat at the Sixty-fifth Annual Session of the Mississippi State Medical Association, Jackson, April 13, 1932.

With improved methods of diagnosis and more earnest consideration, the percentage of reported cases would naturally increase but these statistics relating to positive family history indicate that the allergic field may increase; in other words, as our population progresses and increases, our percentage of allergic patients will increase.

With such a new specialty it is only natural that enthusiasts may over-emphasize allergy and a word of conservatism may be in order. It is definitely known that some cases of urticaria are allergic; yet it is estimated that only about 10 per cent respond to allergic methods of diagnosis and treatment and to attempt to treat all cases of urticaria in this manner would be quite disappointing. We must not be extremists either in conservatism or enthusiasm. We should "stay in the middle of the road" and evaluate allergy properly.

It is particularly difficult to understand asthma, migraine, etc., arising from sensitivity to certain foods. Recent work indicates that the specific allergen is not always the protein molecule, but it appears that only foods containing proteins induce symptoms. We are taught that all proteins, in the course of digestion, are broken down into peptones before absorption. These peptones are considered more or less identical, but we know that certain foods cause definite symptoms in certain individuals. From the practical viewpoint, the mechansim of reaction is not as important as the end result.

It is thought by some that abnormalities of the endocrine system may throw some light on the subject. The efficiency of adrenalin in relieving asthma would certainly add support to such a theory. Splenic extract has been used in certain skin conditions with varying degrees of success. It may be in the future that this theory may be proven correct; yet it will be hard to explain how endocrine dysfunction causes an individual to be sensitive to one food and not to a similar one.

Even though the literature on this subject is already becoming voluminous, it is difficult to find reliable statistics regarding relief in allergic conditions other than hay fever and asthma. Our patients have a right to know what percentage are relieved by this form of treatment. If we turn to allergy as a "cure-all" we shall surely be disappointed. Because one case of migraine is relieved by allergic methods is no justification to advise all migraine cases to have diagnostic tests unless they fully realize the chances of success and are willing to try it. Otherwise, we will have so many disappointments that allergy will fall into disrepute.

We, in our specialty, must pay particular attention to allergy. A large percentage of allergic patients will consult us first. We will see those cases suffering with vernal or allergic conjunctivitis, seasonal and perennial hay fever and vasomotor rhinitis; we will also see many who are suffering from headaches due to allergic causes. It, therefore, behooves us to study the subject carefully. It may appear to some that if we give sufficient consideration to our own specialty, we will not have time to study allergy; as a matter of fact we are not giving proper consideration to our work unless we do consider allergy, as it affects our patients. One has only to note the improvement in the sinuses following proper treatment of one case of perennial hay fever or to note the enormous reaction, and perhaps disastrous results, following surgery on an active case of seasonal hay fever to appreciate this fact.

In conclusion, I would like to emphasize the following points: Allergy, while little recognized, is a very important field. Allergic cases are not uncommon and their percentage may increase. Allergic influences are very definitely felt in our field, particularly in rhinology. It is quite important that we familiarize ourselves sufficiently with allergic conditions to be able to make proper diagnoses. Further, I would suggest to the future chairmen of our section that at least one paper relating to allergy be included on the program each year.

ALLERGIC ASTHMA.*

JAMES CARY PEGUES, M. D.

GREENVILLE, MISS.

Allergy plays a very important part in bronchial asthma. Sir William Osler was an allergist. He wrote that asthma was anaphylactic in nature, differing from hay fever only in its location and extent of reaction.

No one has ever been able to explain the inner workings of allergic phenomena entirely to our satisfaction and for this reason some of us are skeptical, feeling subconsciously perhaps that the fundamental cause has not been found. And yet the allergic method is producing results. It also appears to be about as fundamental as the use of mosquito control for the prevention of malaria.

Bronchial asthma is produced for the most part by foods, pollens and animal emanations, and is only produced when the patient comes in contact with certain of them that are poisonous to him. Keep the harmful substance away and he has no asthma. What could be more fundamental that that?

Where a lot of us have made mistakes has been in making a few quick tests and depending upon the results to tell us the offending causes. Pope must have been thinking of something like this when he wrote "A little learning is a dangerous thing, drink deep or touch not the Pieran Spring." To be scientific we should test for every probable irritant in the patient's environment, or until we are sure we have found the cause of his trouble, and we should only be made sure by our results.

Group testing is disappointing, a group test being a mixture of everything in the family group, contains very minute amounts of each one, whereas in the individual test as much of each substance is used as would be of the whole batch in group testing. Often it is the weakly positive substance that may give the clue to the cause. For example, I had a patient that reacted very slightly to lobsters but not to oysters when I tested him. As the two are closely related the patient was advised not to eat either of them. A week or two later he ate some oysters and had an attack that night. If that patient had only been group tested, and no attention paid to mild reaction, the cause of his attack would probably not have been explained.

Balyeat says he obtains allergic reactions in 90 per cent of his cases and he is striving to make it 100 per cent. Rowe claims about 50 per cent is all one can depend upon.

Some of the reasons for negative or very slight reactions may be the use of antispasmodics the day and night before. I recall one case that had been on ephedrin capsules for several days before I tested her. Not a single reaction showed up. Yet her history was positive for allergy and she had previously been tested elsewhere with quite a number of good reactions, and I thought to myself that my testing material had gone bad. Finally she told me that she had been taking so many little pink capsules that she was quite nervous, and then I knew why there were no reactions. Adrenalin will also affect the test, so will belladonna, morphine, nitrates, amytal, and sometimes aspirin and whiskey. Patients greatly debilitated, emaciated or anemic are more difficult for the test, and if a patient faints during the test the reactions, if any, are abolished. This is accounted for in part by the reflex compensatory constrictions of the peripheral vessels.

Not enough attention is given to the pretesting period. As a rule when a patient makes up his mind to have the tests made he wants them made as soon as possible. He would consent to go to the hospital the night before an operation, and to have the operative field shaved, his diet regulated, his bowels cleaned out. The surgeon has

*Read before the Section on Eye, Ear, Nose and Throat, at the Sixty-fifth Annual Session of the Mississippi State Medical Association, Jackson, April 12, 1932.

found out that such a procedure is worth while and he insists upon it. But the poor asthmatic is rushed through as soon as he comes in and he may have taken two or three hypos of adrenalin before he comes, in order to get through the ordeal without an attack.

Rowe says the best time to obtain good reactions is just before or during an attack. He might have said that the worst time for such a test is right after a big shot of something to prevent an attack.

I have produced attacks in two of my cases during the course of the test, and the reactions were the best I have been able to obtain; the results likewise were 100 per cent relief.

Perhaps part of the ideal pre-testing treatment would be to have the patient spend 48 hours in the hospital in an air filtered room on a non-allergic diet. This would enable the patient to obtain relief without resorting to antispasmodics and yet afford time for the elimination of drugs that might render the tests negative. Twice each day the area to be used for the test should be steamed and massaged in order to stimulate the circulation but not to the point of making the skin tender. Weak patients should be built up first and tested afterward.

In making the tests it is well to use both the scratch and the intradermal method. In the former small skin scratches about ½ inch long are made not deep enough to cause blood to flow but probably a little deeper than the ordinary vaccination scratch. The upper part of the back or arm is usually used. In the intradermal method the hypodermic needle and syringe are used and the substances injected between the two layers of skin. This is considered by some to be a more delicate and more reliable test than the scratch test.

The reactions may begin to show up immediately and some may appear several hours later, and some may be delayed until the next morning.

A careful history often elicits an idiosyncrasy for certain foods and substances and these should be kept in mind in making up a diet and routine. Occupation must not be neglected in considering possibilities. For example, a wholesale groceryman developed asthma recently, and he only had it when he went into the warehouse where flour was being loaded or unloaded. His test showed four-plus to wheat and very little of anything else. As long as he stays away from flour he is entirely free of his trouble.

The best results are obtained in young people. The cases that start before five are said to be more resistant than those that start a few years later. I believe that part of this may be due to the difficulty in finding the cause. Skin tests in small children are not easy to make and it is very natural to omit a great many of the substances generally used in the asthmatic test.

The older people, fifty and beyond, usually have relaxed skins that fail to respond to the skin test as actively as do younger patients. This fact was not appreciated for a long time. Much valuable knowledge may be gained from even mild reactions in the aged. Bronchitis and weakened hearts are much more common in older asthmatics, and these concomitant conditions have not been given the proper attention in the past.

The longer the patient has had the disease the more difficult it is to eradicate. In this respect I believe it is no different from other chronic diseases. This difficulty may in part be explained by the presence of other diseases that complicate the picture, in part by the unusually large number of substances to which such a patient is as a rule sensitive. And the patient cannot always be removed from all of his positive allergins. A person long afflicted with any disease that reacts in such a spasmodic manner has established deep seated habit reflexes that are easily set in action. These are hard to break.

Diagnosis: True asthma in children is frequently unrecognized because it may appear in the form of a peculiar kind of croup,

attacks of bronchitis or an apparent broncho-pneumonia that gets well over night. The child may have constant spells of wet nose, or the habit of licking his lips, and these should make one suspicious of a specific sensitivity to some protein as a cause After the asthma has been well established the diagnosis is easy.

The primary factors in children may be pollens, animal emanations, food or a combination. Balyeat says, "The secondary factors play such a vital part that success or failure may depend entirely upon the attention given to them." He classes food as a secondary factor in adults but says it becomes less and less a factor as maturity is approached. All authorities are agreed that every factor is vitally important.

In adults the pollens such as elm, maple, cottonwood, oak, cedar, bermuda, timothy, Johnson grass, amaranths and ragweed, and the foods are factors. So also are the animal emanations. There are so many of these factors that it is futile to attempt to guess which ones are causing the patient's asthma. In addition one must not forget that there is such a thing as bacterial allergy. Some authorities would call bacterial sensitivity a secondary factor. Brown makes tests for each of the common forms of bacteria and if a reaction is obtained he prepares a specific vaccine. He feels that bacteria are primary factors in some cases and probably a secondary cause in others. Rowe and Balyeat on the other hand have found no advantage to be derived from specific tests for bacteria. They say a stock vaccine is as good as a specific vaccine in their cases and they do not lay much stress upon the bacterial cause, probably feeling like a number of authorities do about the "cold shots" that the results more often prove disappointing. Vaccines have not been of much help in our cases.

TREATMENT

Some cases are so simple that the mere removal of some pet from the patient's environment gives him complete relief. Some are more complex and require pollen treatment and staying away from dust and high winds. And some are so compound complex that it is almost impossible to cure them.

The prevention of any disease is always preferable to the treatment, and it seems to me that this phase of asthma has not been sufficiently emphasized.

The figures from most asthma clinics show that heredity plays an important part as a factor in its cause. From sixty to seventy per cent of cases on record give a family history of allergy. From sixty to seventy per cent of hay fever cases develop asthma. If then a patient is seen to have a family history of asthma or hay fever and he gives a history of frequent sneezing spells or itching of the nose and throat and perhaps spells of difficult breathing, asthma must be thought of as likely to follow. All hay fever cases should be forewarned of the asthmatic possibilities if left untreated.

The nose and throat men see "pre-hay fever" and "pre-asthmatic" noses almost daily. The mucous membrane is paler than normal with a slight bluish tinge, and sometimes there is an itching complained of, and sometimes a watery discharge. If there is a family history of some allergic disease like asthma or hay fever such a nose is almost surely an allergic one with the possibility of asthma or hay fever developing at an early date. In all such cases allergy should be thought of.

Another important factor about asthma is to treat the patient as soon as it is known that he has asthma. It has been shown that the shorter the duration of the disease the easier and more complete the cure. When the patient has had the disease a long time the chest is usually deformed, bronchiectasis produced, and there is often an old chronic bronchitis present. Obviously these conditions must be treated. Sometimes a source of irritation may be retention of products in the dilated alveoli.

The habit reflex may have become so deeply rooted as to require hospital treatment where the daily routine may be con-

trolled. And the most recent advances would require the hospital room to have air filters to keep out the pollens and a humidifier to regulate the moisture content. The old stubborn cases may have to be kept in the hospital until their general health has been built up.

All pollen cases should be treated with pollen antigen beginning at least two months before the season for their particular pollen. If the case is one of animal emanations these should be completely removed from the patient's environment and whatever foods are definitely positive should be left out of the diet.

It is possible also that artificially produced fever which is being tried in some clinics may be able to help in a material way when a safe and satisfactory method of reguation has been worked out.

Elimination diets are worth trying when other measures fail. The general health and strength of the patient should be built up as much as possible. Like other diseases asthma is more readily prevented when the patient has a good resistance.

But patience and persistence in working out the individual case from an allergic standpoint will produce satisfactory results in most cases, and the asthmatic should no longer be denied such help.

DISCUSSION

Dr. A. H. Little, Oxford: In treating asthmatics whose symptoms are produced by pollen I would like to mention the perennial or continuous method of treatment. This method is neither new nor one that has not been thoroughly tried out. It was described as early as 1927 by Aaron Brown, and since then it has been both described and its results reported by Figley, Brown, Vaughan, Unger and others.

Briefly, the continuous or perennial type of treatment is the administration of the protective dose of pollen extract at weekly, bi-weekly or monthly intervals throughout the year for a period of several years. The treatment is begun at any time during the year by the usual pre-seasonal method and the dose of pollen extract gradually increased at intervals of three to seven days until the tolerance dose is reached. After this time the maximum protective dose is continued as stated. The advantages of the perennial type of treatment are as follows:

1. The treatment may be started at any time during the year.
2. The patient's visits to the office for treatment are greatly reduced in number.
3. Treatment is less likely to be interrupted by illness, vacations or other causes.
4. Much better results are obtained by this method. The percentage of those completely relieved is greater as the immunity is never lost by discontinuing treatment between seasons, but is retained by the repetition of the maximum protective dose.

The acid base balance of the body with relation to the treatment of allergic individuals has recently been reported by Beckman and others. It is a well known fact that many allergic people are either greatly or completely relieved of their symptoms after acute illnesses. This is explained by assuming that the body prior to the illness possessed a potential alkalosis and that during the illness this was overcome and the acid-base balance thrown more on the acid side. With this idea in mind, treatment with dilute mineral acids and diets that produce acid ash has been given with encouraging results.

Dr. J. P. Henry, Memphis, Tennessee: As Dr. Pegues has said, some of the fundamental principles of allergy have not yet been satisfactorily explained. We have certain theories, however, and treatment, based on these theories, gets results. Each year advances are being made in this particular field of work and those of us who are particularly interested in this subject believe that we now have some definite facts in regard to allergy. As briefly as possible I would like to enumerate some of them.

1. Heredity. As a rule, among the first questions a patient will ask is, "Why do I have hay fever or asthma?" The most logical answer to this question is that the patient has inherited the ability to become sensitive to substances which are harmless to normal individuals. As stated in a paper which I read before this association last year, we found that in dealing with children below the age of 17, 91.06 per cent gave a history of some allergic condition among their antecedents (parents, uncles, aunts, grandparents or great-grandparents). Among adults between the ages of 20 to 40 we found a positive family history in 70.5 per cent and in those from 40 to 60 only 56.2 per cent gave positive family histories. These differences are easily accounted for by the fact that among children the family history is well known, whereas among adults, particularly those past 40, it is difficult to obtain accurate information concerning allergic diseases among the ancestors. I see in the audience this afternoon five physicians who have asthma or some other allergic manifestation and all of them

have children with some form of allergy.

The second point which I would like to mention is the fact that:

(a) Various types of allergy are interchangeable in the same or different generations. For example, a grandparent may have asthma, the parent urticaria and the child abdominal allergy, migraine or hay fever.

(b) All members of one generation may escape but are capable of transmitting the tendency.

(c) Symptoms appear earlier when allergy is present on both sides of the family.

(d) Transmission occurs in about equal proportions through mother and father.

The subject of heredity is of great importance when attempting to make a differential diagnosis between a typical hay fever and non-allergic sinus disease or the diagnosis of certain vague abdominal disturbances, various dermatoses and other borderline cases that are not absolutely typical.

Another question that seems to puzzle is "the age of onset." Laymen do not understand why they were free of symptoms for twenty-five or thirty years and then suddenly manifested some form of allergy. This seems to depend upon the degree to become sensitive which they have inherited. In other words, some children become sensitive before birth to substances in the mother's blood. This must be so because we frequently see children who have severe hay fever, asthma and urticaria the very first time egg yolk is added to the diet. Others develop eczema or asthma at the age of eighteen months meaning that it has taken this length of time for them to become clinically sensitive. Others develop hay fever or asthma due to certain pollens at the age of twenty, thirty, forty or fifty on account of the fact that it has required this number of years to develop the sensitization, indicating that their inherited ability to become sensitive was not as great as that of the infant who manifested symptoms upon first contact after birth.

The third point of interest is the fact that any portion of the body may become involved; the respiratory and gastro-intestinal tracts and the skin are perhaps most commonly affected. However, the brain, joints, and genito-urinary tract do not escape.

I would like to emphasize what Dr. Pegues has said about the importance of thorough testing. An asthmatic should be tested by the scratch method with all of the principal pollens which are common to the territory in which he lives, all the animal epidermas and miscellaneous products which are available at the present time, approximately 150 foods, respiratory vaccines, and any other product that seems indicated by the history. Frequently all scratch tests are negative, particularly in dealing with asthmatics, and therefore it is most important that these be followed by intradermals. I am often asked why we use scratch tests at all in view of the above statement but the scratch tests are as important as the intradermals in that intradermal testing is not entirely safe unless preceded by negative scratch tests. If the patient gives a satisfactory reaction by the scratch method to a certain product, then an intradermal for that particular substance is not made since we have obtained the information desired.

One of the biggest problems with which we have to cope is the correct interpretation and correlation of positive reactions with the history and our ability to do this determines whether or not treatment is to be successful. Probably the most difficult reactions to interpret are those obtained from foods on account of the fact that positive reactions to foods may represent past, present or future history. We often see patients who have had urticaria in the past due to a food such as celery. At the present celery can be eaten without symptoms; yet the skin reaction remains positive. We have also seen hay fever sufferers who were cured clinically but contained to show positive reactions. This emphasizes what I said a moment ago, that correlation of findings and the history must be carefully done.

Getting back to the question of foods, we are never justified in telling a patient that a certain food must never be taken again. All reacting foods should be taken out of the diet but with the distinct understanding that it is for a trial period only. Any food desired, including those that reacted, is added to the diet later but only one food at a time and that food is used five or six days before another is added. Finally, only those foods which can be proved of clinical importance are eliminated, either permanently or until such time that the patient finds small amounts can be taken without harm. This happens in certain cases after a period of abstinence.

In regard to specific treatment, the problem resolves itself into having the patient eliminate or avoid all substances which can be dealt with in this manner such as foods, animal pets, feathers, and certain miscellaneous products. For all allergens which cannot be avoided, such as windborne pollens, orris root, certain occupational dusts, and others, desensitization is necessary.

I have been invited here as a guest of the Ear, Nose and Throat Section and perhaps many will not agree with what I am about to say about the management of the sinuses which are involved to some degree in nearly all hay fever or asthma sufferers. In former years when we saw a patient with asthma, scratch tests would be made and, as stated above, these were usually negative. At that time we were not doing complete and

routine tests, neither were we using the intradermal tests because we did not know that this method would bring out positive reactions which were negative by the scratch method. Having found nothing to account for the asthmatic attacks, we would then advise an operation on one or more sinuses and employ autogenous vaccines taken from these cavities. This method of treatment was most unsatisfactory.

Later on, after going into the matter of allergy more thoroughly and employing the present day methods of testing, we found numerous positive reactions in practically all cases, particularly among children. It then occurred to us that the involvement of the sinus mucous membranes was due to the same allergens which produced the bronchial congestion and it seemed reasonable that the sinuses should respond just as the bronchial mucous membranes did when the offending allergens were removed or desensitization occurred.

During the past five years I think we have been able to prove that this supposition was correct and it is now our custom to do nothing in regard to the sinuses, regardless of how cloudy the x-ray films may be, in the absence of symptoms of sinusitis such as pus, localized pain and temperature. Hundreds of these patients have been free of symptoms over a period of years. For example, here is an x-ray film of the chest showing marked density of the hila shadows and small consolidations in the right lower lobe resembling bronchiectasis in a girl thirteen years of age. She had had asthma for ten years. The roentgenograms of her sinuses show the ethmoids and antra cloudy three plus. This girl was sensitive to a few foods, feathers, certain animal epidermals and pollens. Upon removal of the allergens first mentioned and desensitization with pollens, she has not had an asthmatic attack for the past four years. Here is a picture of her chest take fourteen months after the original examination which is normal in appearance and here is a film of the sinuses that were so cloudy and as you can see, the cloudiness in the ethmoids and antra has entirely disappeared.

In closing, I would like for it to be clearly understood that I am speaking only of allergic patients with secondary, non-suppurative allergic sinus involvement. Non-allergic sinusitis with infection, allergic sinusitis with superimposed secondary infection, or polyps should be taken care of promptly by institution of drainage or any other measure that the otolaryngologist deems best. We do think, however, that allergic individuals make better progress if they can be spared radical operative procedures.

Dr. James C. Pegues (closing): I want to thank the doctors for their discussion. Naturally, in a few minutes one could not take up every phase of the subject, but I tried to cover it from a general standpoint.

When you see a patient with an attack of asthma, the first thing to do is to relieve the patient immediately. Morphine should not be resorted to if anything else will give results. Ephedrin or adrenalin is best to give. It is well to put the patient on ephedrin capsules, and have him take some of them home in case an attack comes on. Lots of times it will prevent an attack. For the old chronic cases, especially if they are far from a doctor, I think it is well to teach some member of the family to give a hypodermic dose, so the patient will not have to suffer two or three hours before the doctor can see him. Even with that, you will have chronic cases where adrenalin, morphine, and everything else you try will not do any good. I find in some of these cases that a good dose of calomel will help them more than anything else. Give them a thorough purge, followed by a light laxative. It is often very beneficial.

I purposely omitted any mention of the sinuses because that is a much debated subject. The nose and throat men cite cases indicating the sinuses as the cause, but I think it is well in these cases to keep our feet on the ground, and if we have bad sinuses, treat them along with the allergic phase.

ALLERGIC REACTION BY REMOTE CONTROL*

NARCISSE F. THIBERGE, M. D.

NEW ORLEANS.

The reappearance of an allergic manifestation at a distal point, has been occasionally observed by most of us. From some, it has received only a passing notice, being classed as a curious phenomenom of no consequence; others have considered it of theoretical value and subject to various explanations; in this instance, the reaction has been utilized as a means of treatment and as a guide for a suitable maintainance. It is pretty generally admitted that the immunity process has its principal seat, if not the only seat, in the individual tissue cells. Whether the reaction is an expression of the combat between the antibody and the antigen, or whether destructive inflamma-

*Read before the Orleans Parish Medical Society, May 23, 1932.

tion or the irritation does not come then, but later when the immune body develops, is still a matter of debate.

In the case cited, we attribute the good result to the detachment of the immune substance formed by the junction of antibody with antigen and its redistribution into the general body fluids. Here is a short history of the case:

Mrs. M. J., white, twenty-three years of age, with a marked allergic family history, was tested by the writer 2 years ago. Allergy first manifested itself in spring 1927, two years after the birth of her son. She had severe albuminuria at the time which cleared up soon after. The following year, the attack developed one month earlier and continued till fall. On testing her, her allergy to cereals and grass was marked. Last fall, she was retested. Under treatment her allergy for grass and cereals had then become negligeable, that for ragweed was quite active and it was then that she presented the peculiar re-awakening of the reaction site each time she had mild hay fever or a large dose of extract was administered.

While taking the extract this spring, the patient herself first noticed the unusual phenomenom: every morning when she experienced mild hay fever the reaction in the tested site of last fall would reawaken; after 10 A. M., both hay fever and reaction disappeared till next day.

She was directed in lieu of hypodermic medication, to massage the recurring reaction for from 3 to 5 minutes every morning. If the massage was continued longer, symptoms of mild anaphylaxis appeared. The swelling of the tested site gradually ceased to recur and the nasal discomfort also subsided.

After its definite disappearance, the pollen extract was resumed. Now the phenomenon can be reproduced at will with a distal dose of 1200 units ragweed. This dose will also produce mild anaphylactic symptoms.

In explanation of the process taking place, we have a choice between the theory of J. W. Wiltser or the explanation of Rich and Lewis.

In tissue culture studies by Rich and Lewis, we have strong evidence that, in tuberculosis at least, reaction takes place in the individual cell. Here in the cell, antigens and antibody lock arms. The fluids of the body serve as carriers and the vessels only avenues through which the carriers work. The theory of James W. Willzer in his article on "Intrarelationship of Immunity and Allergy," is not in contradiction to this; his explanation is that antigen and antibody do not bring about the destruction of tissue but the mixture of the two develop the immune body and it is this third substance which injures the cell. He calls it the immune body. Other investigators call it histamine-like substance. Both theories are compatible. The question is: how do they explain the process taking place in our patient?

The allergic can be considered as having certain spots in the body more on the alert than others where cells develop or hold antibodies: stations or paths where allergens are slowed, stopped and destroyed or tissues which react to the immune body so formed more energetically than in the normal.

The hay fever patient now under observation received the pollen. The antibodies in the nasal mucosa arrested part of the antigen as was evidenced by the local reactions. That part of the antigen not locked by the antibodies in the nasal tissues traveled free in the blood streams and produced no damages until it met the antibodies locked in the cells as in the forearm where the test had been applied. Later when the patient was getting over the spell, immune bodies, formed in the nose and in the forearm, entered the blood stream. The immune bodies gradually flooded the system and brought on a tolerance to the antigen and all symptoms subsided.

The object of the massage was to dislodge the antibodies formed in the cells, and bring about the neutralization of the antigen in the blood streams; form immune bodies in areas where their tolerance by the fluid was greater.

Within recent years, an histamin-like substance has been recovered in the tissues when antigen and body enzymes have met and it occurred to the writer to inject increasing doses of histamin as a non-specific immunizing element.

Fifty of our allergic cases, asthma, hay

fever and skin allergy, which resisted hyposensitization to the various allergens were placed on increasing doses of histamin with the following results: Histamin, hyposensitized, 28 per cent; much improved, 14 per cent; stationary, 54 per cent; aggravated, 4 percent.

It is yet too early for final conclusions and the number submitted is as yet too small. The writer hesitated before presenting this suggestion for fear of needlessly adding to the already large list tf nonspecific antigens but it is only by making sincere researches and having our results checked and discussed that definite progress can be obtained. The agent was used only in very refractory chronic cases. The result has been sufficiently encouraging in the writer's opinion to suggest its use in cases of infection of whatever nature when all other known means have failed. Those interested as to the dose, dangers and contraindication to histamin are referred to a previous paper on histamin in asthma by the writer.

DISCUSSION

Dr. Eustis: Dr. Thiberge has asked me to discuss this paper on account of some work I did 20 years ago on the relation of histamin to asthma and urticaria. I think that Dr. Thiberge is to be congratulated upon the originality of his idea.

He makes no claims, which is very wise at this stage of the investigation, but he has gone at the question of allergy in the right direction. In the past, the man who has been interested in allergy has spoken too much of allergy and antigens without getting at the basic cause of the condition. I believe that this paper is the beginning of an investigation in the right direction.

SOME COMMON CONDITIONS OF THE UPPER URINARY TRACT.*

J. A. K. BIRCHETT, Jr., M. D.

VICKSBURG, MISS.

In choosing this as my subject I wish to describe the common conditions of the kidney and upper ureter met with on a general medical and surgical service, not so much from the viewpoint of a specialist in urology but from that of the doctor who is doing general surgery.

Of the many lesions of the upper urinary tract we could write at length and not cover the subject, for we would have to describe calculus, tuberculosis, malignancy, hydronephrosis, pyonephrosis, stricture and diseases of the upper ureter and acute and chronic inflammatory diseases of the kidney. The conditions which we will outline here are the most common ones which occurred in a fairly comprehensive series of cases which were classed as urological. These most common conditions were pyelitis, hydronephrosis and nephrolithiasis. Though tuberculosis and malignancy are not common lesions in this series we beg to be allowed to refer briefly to them in passing.

Tuberculosis is conspicious by its absence, only one case being seen and that in a child of five years of age. This is not unusual for the incidence of renal tuberculosis is on the decline. This is being noted in all medical centers, very probably because of the fight which has been and is being waged on tuberculosis in general and the fact that tuberculosis is rarely a primary condition. In other words if tuberculosis is cured in its incipiency there is no secondary infection developing elsewhere. Nevertheless we should always be on guard when we see hematuria from a symptomless kidney for the symptoms in the majority of cases, 72 per cent according to Lower[1], were not referable to the kidney. The symptoms are usually referable to the bladder and because of loss of capacity and increased irritability there is frequency, straining and pain, and in children when there is marked enuresis it should be investigated, for it may be an early symptom of renal tuberculosis.

In this series of cases malignancy has occured twice; hypernephroma in both instances, this being the commonest type of renal tumor. These cases had bleeding as an outstanding sign of this lesion. This must

*Read before the Section on Surgery at the Sixty-fifth Annual Session of the Mississippi State Medical Association, Jackson, April 12, 1932.

be differentiated from tuberculosis by careful bacteriological examination. It is well to remember that abnormal bleeding of any organ is a forerunner of malignancy. When blood is found in the urine, be suspicious. In malignancy of the kidney, pain and evidence of a mass formation are stereotyped signs and symptoms, but which are not evident usually until too late to render aid but hemorrhage is always a sign evident in the early stages when something helpful might be done.

Of the common conditions in this series we will first take up pyelitis or pyelonephritis. It is probably better to say pyelonephritis in conjunction with pyelitis for it is rather hard to conceive of the fact that the calyses and the secretory part of the kidneys can miss infection that so readily attacks the pelvis of the kidney. When we collect a specimen of urine and find pus in it, it is certainly hard to say that the infection and pus in that urine came from any one location in the kidney. This infection arrives in the kidney over several different routes. It may come through the blood stream either as a hematogenous or as a conveyor of an infection from a focus located elsewhere in the body. The infection may arrive through the lymphatics of the ureter or through the lumen of the ureter. This is known as the ascending method of infection. We may have infection developing by direct extention from an adjacent inflammatory process or from penetrating wounds of the urinary tract.

We can all recall the patient who recently had a bad cold, a tooth extracted or a boil, who was suddenly seized with chill followed by temperature of 103° to 106° associated with acute pain in the kidney region. This pain may or may not be referred but is mosty localized over the costo-vertebral angle of the affected kidney. However, this pain may be referred to the abdomen mimicking the many acute conditions occupying therein. Many harmless appendices have been removed for pyelitis even though nausea and vomiting are not usual symptoms and pus is as a rule evident in the urine.

If pyelitis occurs as a primary condition and not due to an obstruction of the urinary outflow it will recover under palliative or local treatment. When accompanied by an obstructive lesion there is a tendency for the development of a toxic focus and the formation of purulent material with destruction of the secretory surfaces of the kidney, which if left alone will develop into a chronic diseased condition. When this situation develops we have a chronic pyelitis to deal with. This may be confined to one or involve both kidneys. There may be retention of pus and urine without marked general reaction, only bladder symptoms being in evidence. Later, however, after the kidney substance has been destroyed there is evidence of toxemia and failure of the general health. Pain is not a marked symptom unless there is evidence of obstruction in the form of stone. In chronic pyelitis the chances of affecting a cure is only fair because of the chronicity of the infection and the tendency to recurrence. Braasch[2] in a recent resume of 2040 cases with this disorder, of which 251 were studied for a period of from 10 to 15 years, drew the general conclusions that one-third get well, another third improve and one-third fail to get any benefit. These results in chronic pyelitis can be improved upon if the acute cases are recognized from the beginning and receive adequate treatment from the start.

In connection with this statement it is of interest to mention the occurrence of pyelities in pregnancy. In our series of 249 cases diagnosed as pyelitis there were 36 of these which occurred at some time in pregnancy. Of these 36 it was necessary to induce labor in eight because of the toxic condition of the mother and the inability to progress further with the pregnancy. Three others aborted spontaneously because of advanced toxemia. Of the remaining 25 cases, two delivered normally at time of first admission after receiving treatment.

The remaining 23 cases were discharged as relieved of the pyelitis to be delivered at a subsequent admission or were delivered by their home physician. The cases which aborted or in which it was necessary to induce labor were all cases in the later months of pregnancy, whereas those which recovered and were able to continue to term were the cases in which the pyelitis was recognized early and adequate treatment could be instituted in time to evade the impending danger. Very often a catheterized specimen of urine taken at regular intervals would put us on guard that infection is developing in the urinary tract. Pyelitis in pregnancy is due to the obstruction of the ureter because of the pressure of the heavy dependent uterus, with stasis of the urine and secondary infection. This is noted more commonly in the right kidney because of anatomical reasons.

The diagnosis of pyleonephritis is based upon the finding of pus in the urine with other customary signs and symptoms of pain, leukocytosis and high temperature. The renal function may be markedly decreased depending upon the amount of retention and back pressure on the kidney substance. The function should be interpreted carefully for kidneys of this type have been sacrificed needlessly at operation when a second check should be made on the renal function after the acute stage has subsided so as to enable us to get the real functional value of the kidney. If there is disturbance of the urea nitrogen of the blood then both kidneys are affected. When there is lowered renal function in one kidney there is no change in the blood chemistry. In other words the true work of a kidney under the influence of a pyleonephritis should never be judged until the acute condition has been allowed to subside. This being done no useful kidneys will be sacrificed.

The most conservative treatment is repeated pelvic lavage of the affected kidneys by ureteral catheter with antiseptic solutions, silver nitrate being one of choice, the use of urinary antiseptics orally and intravenous therapy.

HYDRONEPHROSIS

The next important condition in this series common to the upper urinary tract is hydronephrosis. This is the collection and retention of urine in the pelvis of the kidney. The causes of hydronephrosis are many, the fundamental cause being obstruction, with retention and damming back of the urine. These obstructions are due to abnormal congenital development and structural abnormalities. They are also present because of acquired conditions. For example, the congenital causes are tight foreskin, and stricture of meatus and urethra in the lower tract. In the ureter we have abnormal valves and constrictions, or double and triple ureters, and increased mobility of the kidney with resulting deformity of the upper ureter. This is the so-called kink due to the presence of abnormal blood vessels and adherent bands. Cabot[3] states these are present in four per cent of all autopsies where the lower pole of the kidney was studied and he further states that 70 per cent of all hydronephrosis is directly due to this deformity. Of the acquired causes there are many. The obstructive lesions of the genitalia are stricture, tumor and conditions developing in the urethra such as hypertrophy or malignancy of the prostate. In the upper tract we have obstructive factors such as calculus, stricture of the ureter, growths in the kidney itself, or pressure of adjacent organs. Hydronephrosis develops without evidence of an obstruction. This is because of the loss of tone of the pelvic wall secondary to neurological disturbance. With the loss of nerve control the pelvis relaxes developing a larger receptacle in which urine may collect.

The symptomatology of hydronephrosis is not definite. It is possible for this condition to be present for some time and not give evidence of being present until an infection develops and we recognize the picture of pyelitis. For this reason hydronephrosis is known as a silent lesion of the

kidney. In 38 per cent of the cases according to Lower[1] the condition was not recognized until later developments ensued. When there is pain it is usually localized in the kidney region because of back pressure and irritation of the renal substance.

The diagnosis is based on findings made possible by the cystoscope with aspiration of excessive amount of urine by ureteral catheter. The kidney pelvis may be injected with normal saline until discomfort is felt and the amount of fluid withdrawn measured to determine the pelvic capacity, more than 15 cubic centimeters being regarded as abnormal. Opaque media such as sodium iodide or less irritating iodized oil may be injected into the renal pelvis and a radiograph made, the roentgen ray shadow of the outline of the kidney pelvis being readily discerned. Cabot[3] warns of the danger of injecting opaque media into the kidney pelvis, especially when there is a hydronephrosis of large size, that is, where the capacity is as much as 75 to 100 cubic centimeters, as it might be forced into the diseased kidney substance with resulting irritation and necrosis. I have had this experience in one or two cases in which sodium iodide was used, the patients complaining of intense pain over the renal area with severe reaction evidenced by rigor and marked elevation of temperature.

As to the treatment of hydronephrosis, the results vary to a great degree. The first step is to find the causative factor and to facilitate its removal. It is desired to know whether the lesion is unilateral or bilateral; whether it is associated with stone or angulation of the ureter as the causes of the obstruction and if there is an infection present. If it is due to calculi, this may be removed surgically or the ureter may be dilated by use of catheters to make room for the stone to pass. When there is a kink in the ureter we either try to splint the ureter to straighten it out or replace the kidney in its normal position by the use of abdominal support. The kidney may become fixed in a normal position by several well known surgical procedures and the severance of anomalous blood vessels and bands which obstruct the ureter. The treatment of unilateral hydronephrosis is without best results when damage to the renal tissue has developed, because of the lack of resistance and low recuperative powers of the kidney. When there is bilateral hydronephrosis the reparative forces are stimulated by this excess tissue damage and more repair stimulated. This is the phenomenon of renal counterbalance and explains why better results are obtained when there is treatment instituted in bilateral disturbances then in the unilateral. This counterbalance is the well kidney doing the work of the sick one. The unhealthy kidney not having to function because of the efforts of its fellow makes no attempt to affect sufficient repair to resume its normal work. For this reason bilateral lesions due to any disturbing factor, on which surgical repair is done in either of the affected kidneys will show an improvement in the renal function. Gradual reduction of the intra-pelvic tension by regular periodic drainage by cystoscope and ureteral catheter is the best type of treatment as far as palliation is concerned and affords relief in many cases.

NEPHROLITHIASIS

Calculus is a common lesion of the upper urinary tract with which all of us have had varied experience. It immediately brings to mind the discomfort and suffering of the one so afflicted.

The cause of urinary calculus is still indefinite and somewhat theoretical. The causes given are varied, being classified as physiological, metabolic, infectious and chemical in origin. We have infection in the kidney as a primary nucleus of stone, calculus being commonly present when there is evidence of local infection. Anatomical abnormalities are probably accepted as the commonest cause of calculi, the abnormalities present causing stasis of the urine with resulting precipitation of the chemical elements of the urine which form

centers for further calcification and stone building. All of the above reasons for stone formation have a plausible explanation and any one or combination of these conditions may be an answer to the cause of this painful formation, renal calculi.

Renal stones vary as to their size, density and composition. The nucleus or center is that part which is first laid down because of crystalloid elements, blood clots or foreign bodies such as gauze or wax. The calculus gradually grows by having further precipitation added to its surface and becomes laminated or of layer formation, the chief constituents of calculi being uric acid, urates, calcium oxalate and phosphates. Stones made up of these salts are known as hard stones and show up in the roentgenogram more clearly and with less confusion with other shadows than do soft stones or those calculi which are composed of blood clots, fats and cholesterol.

The presence of the calculus in the urinary tract may manifest itself in three ways,—by evidence of infection, irritation or obstruction. It is possible to have all three as a combination in any case and we frequently do. Calculi usually set up an irritation at their site of origin but they can readily migrate elsewhere. A stone which has been found in the tubules or calyses may pass into the pelvis, thence to the ureter and to the outside world with the usual train of signs and symptoms. However, it may become impacted in the ureter causing a dilatation above with hydroureter through which it later regurgitates back into the pelvis where it is left to grow and become a mechanical irritant. What of the stone that develops in the tubules of the cortex and which do not pass out? They become encysted after causing severe local inflammation in the kidney substance with resulting fibrosis and contraction and deformity of the kidney. Abscess may develop with subsequent rupture and severe hemorrhage, sometime fatal. Stone has caused rupture of calyx with extravasation of urine into the lumbar region with resulting toxemia and death. In the presence of stone in the ureter we usually have symptoms of obstruction and irritation though we seldom have a total block of the urinary flow. This is because of the irregularity of the stone. The lumen of the ureter is not entirely blocked unless irritation of the ureteral wall develops and inflammatory edema which results in total obstruction with back pressure and renal irritation. Infection develops secondarily to the inflammatory reaction. When this condition occurs we get lowered renal function, signs of an inflammatory process and general toxic disturbance.

The common signs and symptoms of calculus are easily recognized, pain being the symptom of greatest importance. It may be localized or it can be referred. With calculus remaining in the kidney the pain is usually felt in the region of that organ but it can be manifested in the shoulders, back of neck or distributed generally over the abdomen. These aberrant symptoms were especially noted in a series of cases cited by Caulk[4]. Braasch[5] states that in 67 per cent of cases suffering with ureteral stone the pain is referred to the kidney. This is probably due to the urinary retention and pressure within the renal pelvis. The signs or presence of renal and ureteral calculi are noted in the urine by hematuria, the outstanding finding, but its absence does not rule out the presence of a stone. Pus and bacteria are present after trauma has caused inflammatory developments. Infection and abnormal urine as a rule are present after an attack of renal colic.

The diagnosis is based on the physical findings arrived at by cystoscopy, and laboratory and roentgen ray study. It is important to mention the confusion which may result from mistaking fecoliths, calcified glands and gall stones for renal calculi. This has been done and for that reason when in doubt do a pyelogram of the suspected kidney to see if it corresponds to the suspected shadow in that particular region. In ureteral stone the roentgen ray

catheter or uretogram may be used to identify its location. Uroselectan may be used to differentiate renal shadows. This is really doing a pyelogram or uretogram in reverse order. In shadows of the right renal region we must be able to differentiate between renal and biliary stones. This is facilitated by the visualization of the gall bladder by the well known methods.

The treatment of renal calculi is essentially surgical. No medical treatment which can result as a prevention of this formation has yet been developed. Quinby[6] states that it is the concensus of opinion that once a stone is definitely known to be in a kidney that it should be removed. There are exceptions to this rule. A case for instance who has renal stone associated with some other serious organic disease will be a mortality from surgery performed to remove the stone, the real cause of the failure being the poor general condition of the patient. A stone may be obstructing the pelvic outlet with renal damage and secondary infection because of back pressure. This stone may be easily removed by simple pyelotomy. Large calculi develop an extensive irritation and ulceration and chronic infection resulting in destruction of that kidney with loss of renal function. In a condition of this sort the shortest way out is to do a nephrectomy. As an opposite to this we may have a stone which completely fills the renal pelvis and apparently extends into the calyses and this stone may never cause trouble because of the ability of the urine to flow on unobstructed and without any infection developing. It may never be necessary to molest this stone or kidney. In stone of the cortex when there is pain or signs of an inflammatory process we advise removal because of the danger of the development of extensive abscess with kidney destruction and the possiblity of extension into the lumbar region with extensive abscess formation there. This type of stone is removed by nephrotomy. Stones in this location become difficult to locate at operation, though they were observed with ease after the making of the roentgenogram. To facilitate the location of the position of the calculus in the kidney substance the fluroscope is of great value at the time of operation. The kidney is lifted as much as possible from the lumbar incision the stone being located with the fluroscope and pointed by thrusting a needle into the renal substance till it makes contact with the stone. The nephrotomy incision is then made with the needle as a guide, the stone identified and removed.

I have opened a rather broad subject and have not attempted to go into detail for time does not permit. However, I have attempted to describe some of the common conditions and problems in the treatment of certain common lesions of the upper urinary tract which come under the care of the general surgeon daily. With this desire in mind I wish to thank you for your indulgence.

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DISCUSSION.

Dr. John Darrington (Yazoo City): I listened to this paper very attentively and certainly found it both interesting and instructive. I want to congratulate the essayist on giving us such abundant information in the short time alloted him, and as I listened to the paper I realized that if some of we older men could just pull back the curtain of time and look back twenty-five years to what we did for patients then, we would appreciate the wonderful advance that has been made in the treatment of these diseases of the upper urinary tract. You remember in the old days when a man came complaining of a long list of symptoms we gave him a urinary antiseptic, and next week we gave him another, and that is about all we did. I am so sorry I had not heard the Chair-

man's address at that time, because I could have put a rose under his nose and let him look at the beautiful green grass, listen to the birds sing, and that might have gotten his mind off his ailment. I believe it would have done about as much good as our treatment at that time. If one could make an urinalysis that was about as far as he went. If he was an extra good doctor he could make a microscopic examination and discover pus and blood cells. Or he could introduce a sound, and when he heard it hit a brickbat he made a diagnosis of stone in the bladder.

What has helped us out? Mechanical appliances. We do not know much more about the pathology of urinary infections than we did twenty-five years ago. We know abnormal metabolism and infection produce stones.

If a doctor twenty-five years ago had had a cystoscope he would have had all the medical men coming to peep through it. A step farther and we have the ureteral catheter. The roentgen ray was of no account until we found we could put fluid in and then use the roentgen ray. So we must give these mechanical aids a lot of credit for our advances in diagnosis and treatment of these diseasss.

I congratulate the essayist on having presented a 1932, the "last word" diagnosis and treatment of diseases of the urinary tract.

Dr. P. G. Gamble (Greenville): Most of these conditions are due to infection through the bloodstream, or an ascending infection through the lymphatics, and the stones are usually followers of infection in the pelvis of the kidney or somewhere in the kidney substance. If you stop the infection or remove it you will have fewer stones, and I think we should make an effort to remove all foci of infection—bad teeth, tonsils, or whatever it may be, and this condition will clear up quickly, the stones becoming fewer.

Dr. Birchett (closing): I think it is very appropriate that this paper should be brought before the general meeting, because it is on the shoulders of the general practitioner that the burden falls of treating these cases. If we cannot handle these cases ourselves we can recognize the danger sign, and send the patient where his best interests will be served.

I would like to say a word about hematuria—blood in the urine. Dr. Hume made an able discussion of this subject at the last meeting of the Southern Medical Association, and brought out the point that blood in the urine is nearly always a serious condition—in about 90 per cent of cases. In the absence of acute posterior urethritis and other acute conditions, it is nearly always serious, and a patient passing blood in the urine should be given the same careful consideration that we give to a woman with a lump in her breast, or irregular bleeding from the cervix.

Another thing is ureteral colic. We see this oftener than any other lesion of the upper urinary tract, and the reason is that the patient in pain seeks a doctor. When we see one of these patients, what is the best procedure? I think the procedure should be conservative—morphine, forced fluids, and leave them alone to see if Nature will not pass the stones into the bladder and the patient be relieved. We cannot leave them alone, however, if we get two signs, temperature and pain in the back. When we get these signs we know the stone is impacted and we have infection with all the chain of complications to which it leads. But if the symptoms are generalized we leave them alone until we get pain in the back and temperature.

ACUTE OSTEOMYELITIS: TREATMENT AND IMPORTANCE OF EARLY DIAGNOSIS*

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TUPELO, MISS.

This paper is not an academic one and I should like to preface my remarks with an apology to the orthopedic surgeons to whom this subject rightly belongs. I would like for it to be a plea from hundreds of maimed and crippled individuals who represent our mistakes of the past. We all have these living monuments.

In a review of the literature, over a period of the past seven years, since I have been a subscriber, I have found less than one dozen articles on acute osteomyelitis, appearing in Surgery, Gynecology and Obstetrics, Annals of Surgery, Journal of the American Medical Association, and the New Orleans Medical and Surgical Journal. As far as I was able to ascertain, two papers have been read before this association in that period. Certainly, there have been numerous articles published in orthopedic journals, but I have reference here only to literature available to general surgeons and practitioners. The four I enumerated above are representative of this type. I believe the gravity of this disease with its deforming and disabling possibili-

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ties warrants more consideration from the general surgeons and medical men and therefore I offer no apology for presenting this old subject to you again.

Acute osteomyelitis is chiefly a disease of childhood occurring most frequently between the ages of two and twelve years, due no doubt to the marked vascularity of the growing bone at this age plus a predisposition to injury. The predisposing factors are anemia and malnutrition. The primary foci of infection can usually be located in some other part of the body such as infected tonsils, boils, abscesses, carbuncles, infected wounds, and abrasions. The infecting organisms, which are most frequently the staphylococci, streptococci, pneumococci, and typhoid bacilli, are transmitted by the blood stream to the site of infection, except in the traumatic type complicating compound fractures, which are purely local.

The site of the primary infection is usually in the loose cancellous portion of the long bones, adjacent to but not involving the epiphysis, unless it be late in the disease. The end-artery system and sluggish circulation in this area are thought to be causative factors for the lodgment of infected emboli here. The spread of the disease from the site of infection is from within outward through the cortex of bone which is thinner in this area than over the diaphysis. Following this rupture outward the periosteum becomes stripped from the bone and as pressure increases rupture into soft parts takes place. If treatment be delayed the process will enter into the chronic stage and sequestration will gradually follow. It is also through this delay that the medullary canal becomes infected from without inward through the Haversian canals.

CLINICAL SIGNS AND SYMPTOMS

An early diagnosis is essential if we are to avoid a surgical catastrophe with possibilities of recurrent disability or permanent deformity throughout life. I believe I am justified in saying the average practitioner is not aware of the frequency of acute osteomyelitis in children. He is not alert to catch the symptoms and manifestations of this disease as he is the less formidable and commonly diagnosed acute appendix, and yet I dare say the diagnosis is just as easy. It is a condemning fact that in a recent review of the histories of a large number of cases, made by an eminent orthopedic surgeon, shows that almost every patient is seen the first forty-eight hours by a physician; however, about 75 per cent of them have been diagnosed and treated for rheumatism for one to three weeks.

The symptomatology of this disease varies in direct ratio with the intensity of the bacteremia present and extent of area involved locally. Therefore, it goes without saying, that in all cases we do not see the classical picture of unbearable pain, rigors, high fever, etc. Some cases of acute osteomyelitis run a low grade course, are slow in onset and limited in area involved, and again we recognize another type in which the bacteremia is the predominating feature terminating in early death before much local manifestations are noted.

The most frequent type of case will present severe throbbing and constant pain, located near a joint, accompanied by a point of extreme tenderness at or near the epiphyseal line of a long bone, high fever and rigors, rapid pulse, marked signs of toxemia, and a polymorphonuclear leukocytosis. These clinical signs, usually in a child, together with a history of primary foci and possibly an injury to affected parts, make the diagnosis of acute osteomyelitis justifiable. If we see these patients after the periosteum has been elevated and rupture has taken place into the soft parts, we may add to above signs, swelling, redness, and fluctuation.

DIFFERENTIAL DIAGNOSIS

The differential diagnosis will of course determine the course of treatment and is, therefore, very important. Acute rheumatic fever, as stated above, is the commonest condition by far for which acute

osteomyelitis is mistaken. Non-articular symptoms are uncommon in rheumatic fever; hence, a severe toxemia with symptoms found only about one joint should arouse one's suspicion. In rheumatic fever the pain with swelling and tenderness is in the joint, not in proximity to it, all the signs are articular, and all movements of joint are painful. The toxemia in acute osteomyelitis is greater, hence the leukocyte count will be higher, the pulse faster and the temperature higher. Rheumatic fever is rare in adolescence—osteomyelitis most frequent at this age. If after considering these facts, doubt still exists, exploratory puncture of the metaphysis should be made. In the rheumatic condition this will do not harm, and in the osteomyelitis it will safeguard the patient. Other conditions, such as typhoid fever, cellulitis, and infective arthritis should be kept in mind but are rarely difficult to eliminate. Roentgen ray findings are of very little or no value during the early stage.

TREATMENT

In no other acute inflammatory condition does the prognosis depend more largely on the time at which a correct diagnosis is made and efficient treatment instituted. When the diagnosis is made, or as stated above, even strongly suspected, surgical interference is demanded at once. After considering the mode of onset and the pathways of the spreading osteomyelitic process we should arrive at a definite technic that should have for its aims the following principles:

1. Early and effective drainage.
2. Preservation of healthy bone tissue and avoidance of spreading the infection to unaffected areas—medullary canal and adjacent joint.
3. Combating the systemic infection and toxemia by blood transfusions, etc.

Early and effective drainage implies not only incision through the periosteum to relieve tension in a subperiosteal abscess but also by drill holes or window into the loose cancellous area of the metaphysis. The subperiosteal abscess is secondary to the primary focus in the bone, and although there is present a hiatus leading into the bone, this will not be of sufficient size to permit drainage and relief of tension inside of the bone. In making these drill holes care should be taken lest they penetrate the medullary canal or the epiphyseal cartilage and thus spread the infection to the adjacent joint or medullary canal. This can be avoided by using the technic as advocated by Dr. Starr of Toronto. It is also very important that the incision through the periosteum does not extend beyond the epiphyseal line in order that the attachment here may be preserved and the joint be thus protected. The after care of the wound consists of moist dressings with mild antiseptic solutions. Immobilization of the limb by a back splint is usually advisable. In those cases showing no pus beneath the periosteum it is usually wise to proceed further and make an opening into the bone. If done under strict asepsis no harm will be done if there is no infection present and immeasurable benefit if it be present. The systemic treatment should consist of supportive measures such as glucose, high caloric diet, and blood transfusions.

The early diagnosis and treatment I have just outlined for you is Utopian; however, it is regretable, but true, that few cases are seen early enough to carry out such treatment. I have had infinitesimal number and I feel sure my experience has been practically the same as other general surgeons. It is for this reason this paper has been presented to you, that I may again call your attention to this most important disease and make a plea for early dianosis.

The majority of cases referred to me are like those referred to most general surgeons, with extensive bone necrosis, beginning sequestra formation, etc. In cases that fall in this category I have used the

modified Orr technic with very gratifying results, and I should like to digress from the main object of this paper in conclusion and give you a brief resumé of a case treated in this manner.

The patient was a female, aged 9, who had been ill for seven weeks prior to admission to the hospital, April 23, 1931. The history was that of the usual case of osteomyelitis.

The physical examination revealed a very much emaciated and anemic white child. The right leg was held in flexion and carefully guarded by the patient. There was marked swelling of the entire leg extending from the knee downward. There was angulation of the leg just below the knee, denoting a pathological fracture. About three inches below the knee and on the anterior surface of the leg there was a sinus discharging pus. (This was a stab wound made by family physician two weeks prior to admission.) Roentgen ray showed marked necrosis throughout the entire length of tibia with a pathological fracture through the metaphysis.

After preliminary preparation operation was performed. A tourniquet was applied above the knee and an incision through the soft tissues, fascia, and periosteum was made throughout the entire length of the tibia just medial to its anterior surface. The bone was unroofed and saucerized from one epiphyseal line to the other, being careful to leave no overhanging edges. All diseased tissues were removed gently with curette and oozing controlled by hot packs. After the wound had become dry it was swabbed with iodine solution followed by alcohol. A vaseline gauze pack was then inserted loosely and wound dressed. After making proper alignment at the fractured site, a plaster spica cast was applied from the hip to the toes. Forty-eight hours after operation patient was discharged to return in one month for the first dressing. At this time a window was cut in the cast over the entire length of the wound and vaseline gauze pack removed. At this time there was abundant healthy granulation tissue present in the saucerized area of bone which had partly extruded the pack. The wound was again mopped with iodine followed by alcohol to prevent secondary infection that may have been introduced at the dressing and vaseline gauze reinserted. This procedure, monthly dressings, was repeated four times and at the end of the fifth month cast was removed and wound completely healed. Her total time in the hospital was less than one week and a total of four dressings were applied. In comparison with the old methods, with prolonged hospitalization, daily painful dressings with various antiseptics, I think this method is far superior as regards results, comfort and economy for the patient, and as a time saver for the physician.

DISCUSSION

Dr. Murray Davis (Memphis, Tenn.): I think in discussing this paper probably the best I can do will be to urge you to do a little preventive medicine in better education of our people. As the doctor has told you, it happens more frequently in young individuals, and as a rule more frequently in the city than in the country. As to sex, it happens probably more frequently in boys because of their roughness and playfulness—making them more liable to injury.

The doctor should urge people to watch out for foci of infection, train them to look out for minor things. I think this will prevent more osteomyelitis than any other thing. As the doctor has said, this condition often occurs in childhood, and given a child between two and twelve with acute, sudden onset of severe pain in the end of the long bone, with points of tenderness, high fever and rapid pulse, and there can hardly be any doubt of the diagnosis. The differentiation the doctor has brought out very well, and we should remember that no positive findings are obtained by the roentgenogram. In other words, a negative roentgenogram is probably one of the helpful factors. The thing to do is to make an early diagnosis and get to the treatment; open up at the point of maximum tenderness over the point of maximum pain, but do not do too much. So many times children do not stand surgery well and the least possible amount of trauma is the best for them. We should of course make the opening large

enough to get down to the bone and establish drainage, and quit. Do not operate much nor do too much treatment.

Dr. Joseph E. Green (Richton): I do not do any operating, but being connected with a charity hospital I have to do a lot of holding to accommodate other people. I think this is a timely paper the doctor has brought to us, and if there is any way possible we should impress upon ourselves and our confreres the importance of this condition. I notice the doctor from Memphis says the most of it is in the city. But you have not practiced in the woods, doctor. I thought most of it was in the country. At the charity hospital they come in numbers—most of the time we have one or two cases of osteomyelitis. They are mostly in children from twelve down.

I want to report two cases. I recently spent four months in New Orleans, and spent a good deal of time in Dr. Isadore Cohn's department. The first case was a baby six months old, brought in with double osteomyelitis of the tibia. A good doctor had treated the case for a week or ten days. I believe doctors could diagnose these cases better if they tried. The first thing is to do lots of looking and lots of talking. Get the child's mind off of what you are going to do. This baby fell off the bed, and in 24 hours developed rheumatism which could not be eased. A look was all that was necessary. There is a glittering appearance that is not found in anything but osteomyelitis. I think the surgeon must have taken off nearly all of the upper third of the right tibia. He found lots of pus. In a few days when this child was ready to go home it developed in the hip. The doctor went in. The thing to do is to get drainage. Then the patient must be well fed and have plenty of water—he must be supported. That baby went home well.

Another case came in that had been treated by a good doctor. He wrote a long letter explaining that he had watched the case very closely, that he knew it was rheumatism, but the patient did not respond to treatment. The child was desperately sick, dehydrated, almost delirious. I laid my hand on the knee very gently, and I thought "osteomyelitis."

As a general practitioner treating children I do not use surgery. If you get the history of a fall and in 24 to 48 hours the child has pain and tenderness, do not wait to treat that case; unload it on a skilled surgeon. Early diagnosis, early in the hands of a surgeon, proper surgery and drainage, plenty of food and water, and they will get well.

II. THE RATE OF ABSORPTION FROM EXTENSIVE SUPERFICIAL BURNS

ROBERT KAPSINOW, M. D.

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Previous communications (I) (II) have reported that the presence of a toxin, prepared by extracting burned skin, which had formerly been considered the cause of death in extensive superficial burns, was unwarranted. Data were presented indicating that the so-called toxin was in reality alcohol that had failed to be completely removed. The confusion resulting from this error which had been handed down in the literature, has been obstructing the clarification of the burn problem.

In order to determine still further the possible presence of an unknown toxin that has hitherto been undiscovered and that some may yet feel is present in the burned skin, a group of experiments was performed to study the rate of absorption from extensive superficial burns. Granting the presence of an unknown burn toxin, it is obvious that to produce symptoms the substance must be absorbed from the injured area into the blood.

Advantage was taken of our knowledge of the behavior of phenolsulphonphthalein.† When injected subcutaneously[3] this dye, introduced in a dose of 0.6 mgm. subcutaneously in normal rabbits that have previously been supplied with 50 c.c. of water by stomach tube, will rapidly pass through the urine. The present investigation was divided into three sections: (a) Injections of P.S.P. into normal rabbits; (b) injections of P.S.P. in burned animals, the dye being introduced at a site remote from the injured area, usually the back; (c) injections of the dye into the burned area. Injections into the burned animals were made at varying intervals after burning. In all three sections the animals were treated alike; *i. e.*, each re-

†P.S.P. is used hereafter for phenolsulphonphthalein.

ceived the same dose of the dye after the introduction of 50 c.c. water by stomach tube. Specimens of urine were obtained by expression of the bladder at the end of one and two hours. Urine collected over longer intervals was estimated in 24 and 48 hour periods. The dye output was determined with the Duboscq colorimeter.

OBSERVATIONS (FIRST EXPERIMENT)

Normal animals—There was a considerable variation in the dye elimination but the extreme limits were not widely separated. The average first hour output was 51 per cent and the second hour 34.5 per cent. The average total two hour elimination was 86.0 per cent.

Burned animals injected at a remote site—During the first eight hours after the burn was sustained, there was an apparent delay in the rate of elimination of the dye. Later the rate of absorption approached very closely that of the normal animals. The average output for the first hour was 48.0 per cent, the second hour 34.0 per cent. The average total two hours output was 82.0 per cent and for the total 24 hours 92.0 per cent. This demonstrated that for the period and conditions of this study, there was no failure on the part of the kidneys to eliminate the dye.

Burned animals injected in the burned area—A study of the data indicated an entirely different result. The rate of elimination of the dye was greatly delayed during the entire 72 hours of the experiment. The animals were not carried further because beyond this time the injured skin cracked and the edema fluid present leaked out with an invariable loss of the injected dye from the wound. The average for the first hour was only 6.0 per cent, for the second hour 4.5 per cent, the average total two hour period 10.0 per cent. Excretion after 24 hours was only 20.5 per cent, and after 48 hours there was still a retention of the dye in considerable quantities held in the burned area.

The delay in the excretion of the dye from the burned area seemed to definitely indicate a failure of the organism to absorb more than a mere fraction from the site of injury. This observation agrees with other investigations,[4] that the need for water in the case of the burned animals is much greater than normal and undoubtedly a portion of the water supply is diverted to the wounded area from the usual urinary channel. Even after 72 hours there is evidence of a greatly decreased reabsorption into the blood stream from the injured area.

It is obvious therefore that the premise of the presence of a toxin which might be absorbed from an extensive burn and which causes the symptoms noted, at least during the first 72 hours following the burn must be fallacious. These experiments indicate a holding back rather than a pouring out into the blood stream of any supposed toxin from an extensive superficial burn.

As further evidence that the spectre of a toxin elaborated in burned skin inducing detrimental influences is groundless, a group of experiments utilizing the well-known action of strychnine to produce convulsions and death after subcutaneous administration, was employed. Strychnine is considered one of the most potent poisons from point of view of rapidity of action and size of dose required. In these regards strychnine has no rival.

This series of experiments was likewise divided into three parts: (1) The appearance of convulsions and death in normal animals after injection of the minimum lethal dose; (2) the effect upon burned animals injected at varying intervals of time thereafter at a remote site, usually the back; (3) the time response of symptoms of animals injected in the area of the burn. The dose of strychnine nitrate used was the usually accepted minimum lethal dose of the rabbit, namely, 0.6 mgm. per kilo.

OBSERVATIONS (SECOND EXPERIMENT)

Normal animals—Twelve rabbits developed convulsions between 5 to 22 minutes after receiving the M.L.D. The average

time was 12 minutes. Eight died in 25 minutes. Only 33 1/3 per cent recovered.

Burned animals injected at a remote site—Injections made at varying intervals after burning indicate that a slight delay in the onset of convulsions occurs, the longest interval being 35 minutes, appearing 1 hour after the burn. The average period of onset was 15 minutes. This tends to correspond with the lagging of absorption noted in the first 3 hours when P.S.P. was injected in the back of burned animals. Of this group 62.5 per cent recovered. Fluid is everywhere being withdrawn and transported to the area of the burn and this may account for the delay in the onset of symptoms in this group.

Burned animals injected at the site of the burn—This series conclusively demonstrates the failure of the onset of symptoms when such a potent poison as strychnine is injected into the burned area. The onset of convulsions immediately after the burn was to be expected since the capillary damage had not yet been exerted. Of this group 84.4 per cent were alive after 24 hours. That there is, however, some slight absorption of strychnine must be evident from the P.S.P., but the quantity is so small that at no time is there enough in the circulation to produce characteristic symptoms. Other animals received five times the M.L.D. in the burned area without any harm. Therefore, the presence of an unknown toxin that would have a more rapid absorption rate and that would be more potent than strychnine as indicated in these experiments is absurd, and to suppose such a toxin is but to muddle the solution of the burn problem.

CONCLUSIONS

The rate of absorption of P.S.P. and the failure to elicit symptoms following the injection of large doses of strychnine at the site of an extensive superficial burn is offered as further proof that the constitutional changes due to this injury is not due to an alleged toxin elaborated in burned skin.

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THE REFRACTION PATIENT*

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There is a wide-spread belief that examination by an ophthalmologist is an expensive and unnecessary preliminary to the wearing of glasses.

An optician remarked to me that he did not see why an eye specialist should get a higher fee than he for making a trial case test. Neither do I, but it must be very exceptional for an ophthalmologist to make no more than a trial case test—certainly more exceptional than for a non-medical examiner to fit glasses for diseased eyes that need other treatment.

The ophthalmologist has had education and experience in general medicine and can recognize the effects of various systemic diseases on the eye, as well as disease of the eye itself. He endeavors to make an examination that enables him to give the patient the best advice and treatment possible, based on the information obtained and his own knowledge. Let us suppose a routine examination, making comments as we proceed.

History: Age and occupation. What is the present complaint and what is the duration of it? Headache? What part of head? When does it come on? Does it keep you awake at night? Do you wake with it? Is it brought on by eye work? How is the general health? Have you worn glasses? The symptoms of eye-strain are usually of more than a few days' or weeks' duration. The headache of eye-strain is rarely very

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severe and is rarely present on waking in the morning.

The patient is first seated facing the light for external examination of the eyes. A persistent hyperaemia of the conjunctiva may be caused by accommodative or muscle strain; dandruff, dust, lint or some other external irritant; alcohol or other chemical poison; toxaemia, such as intestinal intoxication, food idiosyncrasy, pyelitis, oral sepsis, infected tonsils, etc.

The pupil reaction is noticed. The Argyll-Robertson pupil is significant of disease, especially tabes. Unequal pupils may mean disease, may accompany unequal refraction of the eyes, or may be merely a peculiarity.

The tension of the eyes is taken by palpation. If increased tension is suspected, the tonometer is used.

The next step is the use of the ophthalmometer. Small readings mean little in my hands except that a reading of from 0 to .50 with the rule indicates no astigmation. If a large corneal astigmatism is found, we know at once that the patient needs glasses and have an approximation of the amount and axis of the cylinder.

The patient is next seated at the trial case and the vision taken. About .75 less than the cylinder indicated by the ophthalmometer is placed in the trial frame and the sphere is increased until vision can not be improved further. The crossed cylinder is now applied in the first position (coinciding with the cylinder in the frame) and in the second or opposite position. The cylinder is increased or diminished depending on which position of the crossed cylinder gives the better vision. The sphere is tested with a plus and minus .25. The axis of the cylinder is tested by rotating back and forth until the letters begin to look worse, and selecting the midway position. The crossed cylinder is then tried again and so on until the two positions of the crossed cylinder give equal vision or until the second position gives better vision than the first.

If there is no cylinder in the trial frame, the crossed cylinder indicates whether a cylinder is accepted.

The muscle balance is now tested with the Maddox rod and the muscle strength with prisms. The hypervergence, divergence and convergence should be in the ration of 3; i. e., 2 to 3, 6 to 9, 18 to 27. An imbalance or a weakness of duction in one of the three directions calls for examination of the nose and throat for pressure in the middle turbinate region, sinus disease, infected tonsils and adenoids. Weakness of all the exterior muscles may indicate a general asthenia.

Paresis of the ocular muscles usually manifests itself by diplopia at distance. The paretic muscle may be found by moving a candle from side to side and up and down at a distance of 9 to 10 feet, while the patient keeps it in fixation. Diplopia appears and increases as the candle is moved in the direction of action of the paretic muscle.

Paresis is significant of injury or disease, such as skull fracture, syphilis, rheumatism, diabetes, influenza, diphtheria, encephalitis, focal infection. Syphilis most usually affects the third nerve, but may affect all of the ocular nerves. Paralysis of accommodation alone, if not due to a cycloplegic, may be caused by diphtheria or food poisoning.

The near point is now taken and enough sphere added to bring the near point up to about 10 inches. It is well to take the muscle balance at the reading distance as a near exophoria of more than 10 degrees may prevent comfortable reading with the glasses.

In the above trial case test it is assumed that the patient is a presbyope. The final step is the ophthalmoscopic examination, which is especially important in presbyopes. For this, a mydriatic is usually necessary. Two or three drops of cocaine solution instilled at 2 or 3 minute intervals, followed by one drop of 3 per cent ephedrine solution gives sufficient mydriasis in twenty or thirty minutes.

In patients under the presbyopic age a cycloplegic is generally used. I use it in nearly every case at the first examination. I often omit it at the second examination if the glasses have been worn constantly.

As a cycloplegic, homatropine has been satisfactory in most cases. Two or three drops of 3 per cent solution are instilled at ten minute intervals, preceded by one drop of cocaine solution. The examination may be started in thirty or forty minutes. In young children a good method is to instil one drop of homatropine in each eye at bed time, one drop on rising and one drop before starting to the office. In strabismus patients, one per cent atropine solution is instilled three times a day for three days before the examination. When the pupils of an adult are dilated it is good practice to instil a drop of 0.5 per cent eserine into each eye at the conclusion of the examination.

When a cycloplegic is to be used the preliminary trial case test is not so thoroughly done, the main object being to find how much sphere is accepted. This helps in prescribing the glasses when a post-cycloplegic test is not made.

When a cycloplegic is used the patient is first refracted with the retinoscope. In young children the main or entire reliance in determining the refraction is placed in the retinoscope. In other patients the final resort is the trial case test. The correction found by the retinoscope is put into the trial frame and is improved as much as possible by testing alternately with the spheres and crossed cylinder as already described.

If the patient is an adult with a large or complicated error, it is advisable to make a post-cycloplegic test before prescribing.

The ophthalmoscopic examination is made just before the retinoscopy when a cycloplegic is used. In other cases it is usually made last, as soon as enough mydriasis is obtained.

A strong convex lens is rotated behind the ophthalmoscope and opacities in the lens and vitreous are looked for. If a slight opacity in the lens is found, it is not advisable to tell the patient he has cataract until the opacity is found to be progressing. Lens opacity is often only one of several pathologic changes in the eye, and may be the least important. I saw a patient with marked angio-sclerosis and degenerative appearances in the retina and slight opacities in the lens, who had been told that she had cataract. She spent her last years worrying about an operation that would never be done. I have seen patients who had gone blind from glaucoma while waiting for a cataract to mature. I offer as a practical definition of cataract: an opacity of the crystalline lens sufficient to prevent useful sight, or a lesser opacity that is progressing.

The fundus is now brought into focus and examined. A haziness or cloudiness of the disc and adjacent retina indicates an inflammation due to some infection or toxemia. I have recently seen two such cases, one of which was found to have malaria and the other to have malaria and tape worm.

The nerve head is inspected to see if it is pale or hyperaemic; if the edges are distinct or blurred; if it is elevated or if it is too deeply cupped.

The retinal vessels are examined for evidence of hyperpiesis and arteriosclerosis. The most striking early evidence is the apparent obliteration of a vein where it is crossed by an artery. Distally from this point the vein may be more engorged. All the veins may appear more distended and tortuous than normal. The venules may be brought out more distinctly and some have a cork-screw appearance.

The arteries first show increase in the central light streak. Later they become irregular in diameter, having constricted and dilated portions. There may be retinal hemorrhages, usually small petechial or flame shaped, but sometimes large sub-hyaloid. The arteries may become uniformly contracted and there may be

white streaks along the walls. In advanced sclerosis, the arteries become thread like, the lumen is obliterated and there is atrophy of the retina and blindness.

Deposits in the retina are toxic in origin. In albuminuria there are large irregular white splotches. Especially characteristic is the radial arrangement of these deposits in the macular region.

The majority of cases of albuminuric retinitis die within two years. Some live longer and a few recover. If the kidney improves, the retina may improve also. The prognosis is unfavorable in chronic nephritis, more favorable in acute nephritis and most favorable in albuminuria of pregnancy. When to the picture of retinal arterio-sclerosis is later added that of albuminuric retinitis, the prognosis is bad. Choroiditis, retinitis pigmentosa and other diseases may be found during the examination of the fundus.

Perimetry is not done unless the history and other findings suggest it. It is of value in early glaucoma, optic nerve inflammation and atrophy, brain tumor, and cerebral hemorrhage and abscess.

Let us now briefly consider advice and treatment. Some of these patients need to be referred to the general physician. Some need attention to the nose and throat. Some need treatment of the eyes. Many are grealy helped by fitting with glasses.

Astigmatism should be corrected as exactly as possible. Hyperopia of .25 or .50 D. is probably a more normal refraction than zero. Therefore, hyperopia should usually be slightly under corrected. A full correction should be given if the patient has convergent strabismus or esophoria or will use the glasses entirely for near work.

In patients with rather high degrees of hyperopia, when there is considerable difference between the static and the dynamic refraction, only a little more than the dynamic refraction should be prescribed, else the glasses may be too blurred and uncomfortable. If possible, glasses should be prescribed which give immediate comfort and satisfaction and do not have to be followed up by explanation or argument.

Care should be taken not to over correct myopia since the ciliary muscle is weaker than in hyperopic eyes. In high or progressive myopia it is best to under correct two or three diopters. These eyes are pathologic and should be kept at rest as much as possible. The patients should be advised to get out doors to have the general health looked after, and to have suspicious tonsils and infected teeth removed.

Exophoria and convergence weakness usually respond to convergence training—pencil exercises at home and prism exercises at the office. Hyperopia should be under corrected, myopia fully corrected. Rarely, prisms, base in, have to be used in the glasses.

Hyperphoria, if more than two or three degrees, may cause symptoms which require the wearing of a vertical prism to neutralize about half of the imbalance.

The eye examination should be repeated every two years or less, depending on the findings and symptoms. The refractive error is liable to change, making a change in lenses necessary. An unduly great change in refraction is suspicious of ocular or systemic disease, present or impending. Often the first sign of disease is discovered during the eye examination.

If pathology is found, subsequent examinations give opportunity for observing its progress.

The periodic eye examination is really a health examination and is a means of increasing comfort and efficiency, conserving sight and health and prolonging life.

DISCUSSION

Dr. H. M. Bell (Vicksburg): This is a paper that brings us our bread and butter. I guess you all know that. To the young men I do not think there is very much chance of telling how to fit glasses. It just seems to work in, something that we gain by long experience. The older we get the deeper the rut gets, and we generally get to doing it just so and so and get along all right.

One of the first cases I had a run in with was a good lady about 50 years old. She was hyperopic in one eye and myopic in the other eye. She fitted her glasses at Kress' wearing a plus one. She could see in the distance perfectly; she could read or drive. She did it with one eye in one instance, and the other eye in the other instance. I fitted her and she told me afterwards that I was a very poor fitter, and she went back to Kress and has stayed there ever since.

I recall another patient in recent years. Each eye is a plus one with a plus one and a half cylinder. He can see 20/15 easily. Put these glasses on him and he cannot get out of my office. Put the cylinder axis 15 degrees off 180 and he wears them perfectly comfortably. You have got to fit the glasses and make them comfortable or you haven't done the job. Another type of case that has caused me a great deal of worry and cost me a great deal of money is the presbyope who develops a 50 to 75 cylinder, axis 180. You put it on and about nine-tenths of them will come back fussing, and you have to give them another pair of glasses. If it happens to be a pair of kryptoks and you do your own dispensing you have had a bad day.

The most satisfactory patients that I fit glasses to are the young school kids. It is done by slip shod methods in most cases. They usually have a hyperopia of 1 or 1.25. You give them a plus .75 sphere. They wear it and their symptoms are all relieved. They do not need glasses any way, but they will wear them a year or two and throw them away and they are cured. There is no further come-back. The real fitting of glasses of course in young people should be done with atropine. I have not much respect for homatropine. I use it sometimes. I still have a few patients who have to come to me. I have one patient who wears a half degree prism vertical. She is perfectly comfortable with it, without it she is not. Little things like that come up in the fitting of glasses every day, and you have to watch your step and do it the best you can and get by.

The doctor spoke of a ten inch test. I can not agree with him about that. If I give glasses for reading 10 inches I have to give another pair also. I tried to wear a pair myself and my eyes are most accommodating, but I can not bend my neck and my back when I want to see a thing on my desk that is 15 inches away.

Dr. W. A. Johns (Corinth): Dr. Stevens has covered this subject so well that there is little to add and much to confirm. The principal value of an opthalmologist's over an optician's or optometrist's examination is in the detection of a disease or pathology or accompanying the error of refraction.

My observation has been that small errors of refraction cause most of the headaches, pain and discomfort. With large errors the patients complaint is, that he can't see well. Unequal size of pupils is often due to tuberculosis. Loss of accommodative power makes me think at once of tuberculosis, diabetes, diphtheria and focal infections. Patients in middle life to old age will frequently complain of blurring and smoky vision where you can detect no pathology and later learn it was early softening of the lens or an attack of glaucoma. Have you noticed that in the negro you seldom see glaucoma till the eye is lost or nearly so?

I use homatropine, 1 per cent, one drop in eyes every 5 minutes for ten times. I have often found it did not paralyze the accommodation and would have to use atropine. I have found much trouble with patients 35 to 38 years of age in trying to fit without a mydriatic at first examination. Their eyes would not stay put, would accept one lens and then another. After a mydriatic I would find hyperopia of from plus-2 to plus-4 diopters. I do not understand why many young people with plus-1 hyperopia will suffer headaches and eye strain when others with plus-2.50 will go nearly to middle life with good vision and comfort. The proof is that plus-50 or plus-75 correction relieves the first class, while the other class do not call for help till near 35 years of age. Of great importance in every case is that the frame has proper pupil distance and holds the lenses in right position before the eyes.

Dr. Roy Wilkins (Clarksdale): I know a whole lot about refraction. Sounds funny, doesn't it? I believe I know a whole lot about it because I know I know nothing about it. Within the last couple of months I have been going over one little case. I had a little youngster referred to me by the school because he had some error in his vision. The kid is chronically constipated. I went over him, got as near a correction as I could by home treatment. I thereupon examined him and got a plus 2.26 sphere in his right eye and a plus 50 sphere in the other eye. I wonder why it was. It was something that did not look like that, but that was my refraction with all three tests. We took that kid and put him on a limited diet, restricted diet for about 15 days. He came back and I found him with a plus 50 sphere in his left eye and a minus 25 sphere in his right eye. He said he did not need glasses. I went on and in about 3 weeks on his normal diet I went over him again and he comes up absolutely normal after he has gone through a 15 day diet. I hope Dr. Stevens will bring out just a word about frame fitting. I believe it is one of the very important parts of refraction.

Dr. Stevens (closing): Replying to Dr. Bell about the near point, I was referring especially to early presbyopia. If a patient can not get a

punctum proximum of ten or eleven inches, he needs help.

I agree that the fitting of frames is one of the most important parts of fitting glasses, and it is about the most difficult part to me. I think it is a great pity that we do not have an expert frame fitter. About all we can do is to see that we have a glass comfortable, and have the pupil distance correct. After all, I think, as I said before, the most important part of refraction is the finding of systemic trouble.

WHAT THE LAYMAN SHOULD KNOW ABOUT CANCER

HUGH SHANE, M. D.

MARSHALL, TEXAS

There is just one thing that we really know about cancer: It kills.

We know something of the cause of cancer, though the cause is still debatable, and each man echoes the other's theories or advocates his own, only too frequently without sufficient study. We know how to cure cancer, that is, we know that many cases can be cured if the treatment is begun promptly enough, but we do not know how to get people to come for treatment when their cancerous growths are small enough to be cured by the means we have at hand. The chief thing we know about the cure of cancer is that early treatment is the only successful treatment.

With man's ignorance we shall always have to contend. It explains why the death rate of cancer amounts to nearly 10 per cent of the entire population. It explains why its frequency is steadily increasing. It explains why during the past 15 years the increase for males was 47 per cent and the increase for females was 21 per cent. Part of the explanation, of course, is that our means of diagnosis are improving and that the span of life is increasing, so that more cases are being reported correctly and more people are reaching the cancer period of life. But the true explanation of the mortality rates is that people are not coming to see doctors early enough for their disease to be cured.

Cancer is a growth of abnormal cells that multiply, that invade and destroy normal tissues, and that by means of lymph and blood channels transport parts of themselves to other parts of the body, where they grow, multiply, invade and destroy normal tissues and transport parts of themselves elsewhere, the process continuing until the death of the host. It is only when the cancerous growth has been removed by surgery or destroyed by radium before it has transported itself to other parts of the body that any hope of cure can be given. If, however, it is treated in the early stages by the proper means and in the proper hands, a large majority of cases can be permanently cured.

Please don't forget that. If you wait to be treated until after the cancer has transported itself to other parts of the body —and it does not, as a rule, wait very long to transport itself—then your only hope of a cure is to invoke one of God's miracles. There are very few cases in which anything else will avail.

East meets West in cancer and North meets South. Every race has the disease, with the possible exception of the pure American Indian. Northern Europeans have more cancer than Southern Europeans, and it is likely that race plays some part in the incidence. J. L. Maxwell's comparative figures for China and Chicago show marked differences. In the group that he studied there was an 18 per cent incidence of breast cancer in China, as compared to 8 per cent in Chicago; a 14 per cent incidence of cancer of the male external genitalia in China as compared to .2 per cent in Chicago; and a 7 per cent incidence of skin cancer in China as compared to a .4 per cent incidence in Chicago.

Males have cancer of the mouth, tongue, stomach, gullet, larynx and large bowel more frequently than do females. The most frequent site of cancer in the female is the womb and the breast, although no part of the body is exempt.

Age is important. Cancer can occur before 30 years of age, though it is not usual.

After 35 years the peak mounts gradually upward, but it is wrong and foolish to classify it specifically as a disease of old age.

Chronic irritation and heredity are the two theories which are given most prominence today. Cancer is neither contagious nor infectious. Secondary infection is important only from the standpoint of keeping irritated places from healing properly, and in that respect it assumes the importance of chronic irritation. Anything that irritates any tissue long enough predisposes to cancer. The womb, the breast, the stomach, the bowel, the gullet, the lower lip, and the face, because they are frequent sites of chronic irritation, are also the most frequent sites of cancer.

Whether heredity is the real cause of cancer or is simply a predisposing factor is still a matter of debate. The majority of authorities accept the latter view. Like black sheep, cancer follows the parade of progeny, not necessarily occurring in every generation, but bound to show up sooner or later. Maud Slye, who has made an extensive study of the hereditary factor, reports: "There are apparently two factors necessary to produce cancer. If either of them could be wholly avoided, it might be possible to prevent it. They are (1) an inherited local susceptibility to the disease, and (2) irritation of the appropriate kind and the appropriate degree applied to the cancer susceptible tissues."

Different cancers have different degrees of malignancy. Dr. A. C. Broders has developed an ingenious method of determining the degree of malignancy of every growth by estimating the degree in which the cell differs from the normal cell. The more different it is, the more malignancy it exhibits. There are four grades: Grade 4 is the most fatal, giving barely 10 per cent of five year cures, while grade 1 is the most favorable, giving 90 per cent or more of cures. The higher or more fatal grades are more usually, though not invariably, found in the neck of the womb, the tonsils, the gullet, the stomach and the lungs. The lower grades of malignancy are more usually found in the colon, the body of the womb, the thyroid, the lips, and possibly the urinary bladder and the prostate. Of course this does not mean that growths in these special locations are always of the same grade of malignancy; any grade can occur anywhere, but these findings are the more usual.

We have, unfortunately, only indefinite ways of detecting cancer in its very early stages. Dr. Alton Ochsner has an excellent way of expressing it. Ordinarily, he says, we are not conscious that we have a stomach, a colon or any other organ; when we become conscious of any of our organs, and when we are in the cancer period of life, then is the time to suspect cancer and to keep on suspecting it until it is definitely ruled out. If you are over 30 years of age, for instance, and you become conscious of your stomach through continued indigestion; if you become conscious of your colon through constipation, bloody stools or diarrhea; if you have a sore on the lip that does not heal within a week or 10 days; if you find a lump in the breast (and every woman should inspect her breasts monthly after 30 years for lumps, which are frequently undetected until they are very large); if you have an unusual discharge from the womb; in short, if you exhibit any unusual symptom, then see an intelligent physician without loss of time. If anything happens to direct your attention to any organ that cannot be explained normally, that has not a definite, traceable cause, especially if the condition does not clear up within at least 10 days, then, for your life's sake, see an intelligent physician, especially if you have ever heard of cancer in any of your relatives. Don't wait for pain to develop. Pain precedes death; when it develops, it is usually too late for cure. Do not believe that bleeding is normal with "the change of life." It is always abnormal, especially if it is preceded or accompanied by a whitish discharge.

Avoid the physician who treats you with

salves. Insist on thorough examinations. Remember that internal sites require roentgen ray study, and that external sites, especially the breast, and some internal sites demand removal of tissue for microscopic study.

The prevention of cancer is the best way of treating it. The advocates of the hereditary theory, with whom I am inclined to side, say that for your children's sake you should not marry into a cancerous family. On the other hand, many men, equally well versed in cancer, do not advocate this policy. Anyway, if you have your choice of marrying into a cancerous and into a noncancerous family, why not take the latter? There is too great a risk that cancer is at least partially inherited.

Those who believe that chronic irritation is the primary cause of cancer emphasize other things. Live a sane, hygienic life. Keep yourself healthy. Avoid bad habits, or break them if you have them. Keep the mouth clean and the teeth in good condition; Ewing and others give the excessive use of tobacco as the cause of lip and mouth cancer. If you have any whitish plaques on the lip or in the mouth, have them investigated. Keep the body clean, especially the external genitals. Circumcision is recommended. Watch moles or warts, and if they are exposed to frequent trauma and irritation—as they usually are on the face and on certain other parts of the body—have them removed. Have childbirth injuries repaired promptly, and be careful to avoid infection of the neck of the womb, no matter how it is caused. Keep the breasts clean. Have both breasts suckled, avoid stasis of milk, and do not let one or the other remain useless until the baby is weaned. Such instances could be multiplied, but it is not necessary to continue with them; you yourself should be able to tell just where in your body you have sources of chronic irritation. If you must keep chronic irritation with you, then also keep both your eyes on it. If it changes character, if it gets larger, then for your life's sake, see an intelligent physician at once.

Inform yourself of the facts of cancer, and remember them especially if you are over 30 years of age. You can obtain information from the newspapers. You can obtain all the information you need from the American Society for the Control of Cancer. You can obtain information in the best form from your family physician. And you are not likely to develop cancer or to die of it if you will seek him promptly when you develop an unusual condition on your body or an unusual disturbance in any of your organs, for while cancer, as I said in the beginning of this paper, always kills, it seldom kills the people who are on the look-out for its development and who take it in time.

CHINESE MEDICINE*

R. B. PRICE, M. D.

TAICHOW KU, CHINA.

There is no doubt that the Chinese are among the most ancient of the civilized races of the world, and in the old days they were perhaps leaders in medicine and surgery after the Egyptians. The Nuei Ching is the oldest medical classic in China. The authorship of this book, written on bamboo slips, is uncertain but it is known to have been written at least 3300 years ago though some claim it to have been written by Huang Ti which would make its date about 5000 years ago.

According to the Nuei Ching there are four standard methods of diagnosis, namely: observation, auscultation, interrogation, and palpation. Observation means to note the complexion and expression of the face; auscultation to listen to the voice and sound; interrogation to inquire into the history, symptoms and cause of the illness, and the condition of the appetite and excretions; palpation to examine the pulse. The classic says, "to know by observation is

*Read before the Central Medical Society, Jackson, June 21, 1932.

sublime, by auscultation wonderful, by interrogation skilful, by palpation art." The Thousand Golden Remedies states, "The skilful doctor knows what is wrong by observation alone, the middling doctor by listening and the inferior doctor by feeling the pulse."

The greatest importance is attached to the doctrine of the pulse and it is universally believed that all internal diseases can be revealed by this method alone. In 255 B. C. Pien Chíao promulgated this idea and in A. D. 280 Wang Shu Ho wrote the Pulse Classic in ten volumes. In order to properly evaluate the pulse it is necessary to know two other doctrines which form the basis of Chinese medicine. These are the Yang and the Ying, i. e., two principles male and female, heaven and earth, life and death, day and night, heat and cold, positive and negative, strong and weak, acid and base, etc., corresponding to the even and odd of Pythagoras, Osiris, and Isis of the Egyptians.

The second doctrine is the five elements—metal, wood, water, fire and earth. The human body is believed to be made up of a harmonious mixture of these elements in the lungs, liver, kidney, heart, and spleen, and they are also related to the five atmospheric conditions — drought, wind, cold, heat and moisture, the five planets—Venus, Jupiter, Mercury, Mars, and Saturn, the five colors—white, green, black, red and yellow, the five tastes—pungent, sour, salt, bitter, sweet, the five musical tones, etc. Health depends upon the proper equilibrium of the male and female principles and on the right proportion of the elements. Any derangment of this balance causes disease which manifests itself in the circulation.

Chinest pulse lore is very complicated. The examination is made on both the right and left wrists, the physician using his left hand for the right wrist and his right hand for the left wrist. The best time for taking the pulse is at sunrise. The physician should keep cool and collected first noting if his own breathing is in order, one inspiration and one expiration constituting one cycle of respiration. The normal ratio is four beats to one respiration.

The extent of the pulse is one and one-tenth inches and is divided into three parts, the tsun or inch; the bar (kuan) and ch'ih or cubit. Each of these has two distinct phases, internal and external, making altogether 12 pulses, six on the right and six on the left hand. And each of these 12 pulses correlates with 12 internal organs the normal or abnormal condition of which it betrays. The pulse under the bar corresponds on the right to the condition of the spleen and stomach, on the left to the liver and gall bladder. The pulse felt on the right cubit shows the condition of the Gate of Life (G. U.), on the left cubit it tells the state of the kidney and bladder, etc., etc.

There are four principal pulses, Fu superficial like a piece of wood floating on the water, deep like a stone thrown into the water, slow and quick. These main divisions have many sub-divisions, *e. g.*, slippery like pebbles rolling in a basin, small like scraping bamboo with a knife, empty, full, long, short, overflowing, thready, tense, tardy like willow branches swaying in a light breeze, taut like a musical string, hard like touching the surface of a drum, soft like thread floating on the water, scattered like willow flowers scattering with the wind, etc., etc.,

INDICATIONS OF THE PULSE

The fu pulse (superficial) belongs to the yang or male principle and indicates disease caused by wind, cold, dampness, heat, dryness and fire. If superficial and strong, it denotes wind and heat; if superficial and weak, deficiency of blood; if slow, it means external chills, if quick, wind and fever. A combination of the signs superficial and soft denotes sun stroke; superficial and hollow, hemorrhages; superficial and overflowing, weakness and fire; superficial and thready, fatigue through overwork; superficial and small, seminal weakness. superficial and scattered, exhaustion and collapse; superficial and slippery, wind and phlegm.

A deep pulse belongs to the yin or female principle. It indicates external disease due to the seven passions—joy, anger, anxiety, worry, grief, fear and shock. If the pulse is deep and slow there is weakness and cold; deep and quick, latent heat. If tense it means colic due to chills; if tardy, accumulation due to water. A deep and slippery pulse points to indigestion; a deep and hidden pulse signifies vomiting and diarrhea.

Prognosis is also based on the pulse. In apoplexy if the pulse is superficial and slow recovery is the rule. If firm, rapid and large, there is danger. In typhoid superficial, full and overflowing pulse means recovery. If small, thready and soft the prognosis is bad. In diarrhea a small deep slippery and feeble pulse gives a good prognosis. If strong, large, superficial and quick, the prognosis is bad. One should not be alarmed to find an irregular pulse in cholera. It is only when this sign is combined with a curled tongue and shrivelled testicles that recovery is improbable.

There are nine kinds of pain in the abdomen. A slender and slow pulse indicates recovery.

In disease caused by evil spirits the pulse varies in the two wrists. Where obnoxious influences exist and the belly swells up a tense and fine pulse is curable; a large and superficial pulse is fatal.

According to Chinese anatomy the internal organs are divided into five Tsangs or solid organs—heart, liver, lungs, spleen, kidneys and six fus or hollow viscera—gall bladder, stomach, large intestine, small intestine and the urethra. The function of the organ is to store up, while that of the viscera is to eliminate. The Chi'h or slow pulse reveals the condition of the organs and the Shu or quick pulse tells the condition of the viscera.

British and other foreigners in China consider the pulse lore of the Chinese physician as "downright and solemn quackery." But Dr. K. Chimin Wang, chief medical officer of the Shanghai Hangchow-Ningpo Railroad, whose article has furnished me the information herewith set forth on the pulse, believes that there has been some valuable information accumulated during the forty centuries the Chinest have used their eyes and ears and fingers in the diagnosis and prognosis of disease.

The Nuei Ching also contains some excellent notes on leprosy, written 3300 years ago, as follows:

1. Those suffering from leprosy, ta'Feng, have stiff joints, the eyebrows and beard fall out.

2. The wind scatters through the muscles and comes in to conflict with the wei chi or defensive force. The channels being clogged, the flesh bectmes nodular and ulcerates. And because of the stagnant movements of this defensive force numbness results.

3. The vital spirits degenerate and turn cloudy causing the bridge of the nose to change color and rot and the skin to ulcerate. The wind and chills lodge in the blood vessels and cannot be got rid of.

4. For treatment prick the swollen parts with a sharp needle, let the foul air out until the swelling subsides.

Chaulmoogra oil was first mentioned in the treatment of leprosy in China in the fourteenth century.

Works on surgery and obstetrics were written in China as early as the year 620 A. D. About 1250 A. D. observations were made on the post-mortem examinations of women and this note is quoted by Dr. Maxwell: "If the body of a pregnant woman who has been murdered or has died during labor is buried, after a few days the baby may be born, the joints of the woman having been loosened."

Chinese medical knowledge compared very favorably with that of other countries in ancient times, but the trouble with Chinese physicians is that they have stood still while the rest of the world moved on. All the development of Western medicine in China has been accomplished by

foreigners and the Chinese students they have trained.

Now one might think that if an American physician went to an interior city in China, as I did, and announced that he was ready to treat disease in a new and better way that he would at once be over-run with patients. Such was not my experience. Though the Chinese in Taichow had never read Hamlet still they had his idea that it was better to bear those ills they had than fly to those they knew not of. They asked me questions: "If you are so good why did you move?" "If your medicine is so fine why do you sell it so cheap?" I found myself beset on every side with enemies who spread propaganda against the new system. They said that we would dig out the eyes of the people in order to get the jewels therein for sale, that we would cut out people's hearts to make foreign medicine. Many and varied were the blood curdling tales that went around, and we soon realized that we would have to prove our worth before we could hope to establish a business. It was a slow process. Many came to us that we could not cure and we would hear folks say, "Yes, yes. We told you so."

Another case that gave us some advertisement was a strangulated hernia of ten days standing. The patient appeared almost moribund but we decided at least to open him up. The gut was black and would have been gangrenous, I am sure, in a white man but we finally returned it to the abdomen and closed him up. He made an uneventful recovery.

A woman with a large dermoid cyst of the ovary waited for the delivery of her baby until she grew weary of life so she came to be killed or cured. When she went back to her village well she exhibited herself to all who were curious and as a result one morning five women led by a diminutive grandma appeared at the hospital. When I asked them what they wanted the old lady made a sweeping gesture along her abdomen from the ensiform cartilage to the pubis. I repeated my question and she repeated her gesture. After I insisted that she must tell what she wanted she said, "We want to be cut open. We want you to look around inside us and fix anything that is out of order so that we can all feel good like that other woman." The only diagnosis that we could make was hook worm and we offered to treat them for that but they went home. Nothing but a laparotomy would suit them.

Little by little we have been able to convince the people of Taichow that we have a better way than theirs so that after sixteen years we have won a place in the life of the community. Of course, all the people do not come to us but most of them have us in mind as a last resort.

Some doctors say they would not do medical missionary work. Well, there are reasons for this opinion. Living in China as a missionary doctor takes away opportuities for development; it destroys the chance to make money and reputation; it separates one from relatives and friends. But there is a satisfaction in the work. The medical missionary heals those who have no other hope and more, he aids in establishing a new system of medicine in the place of superstition, witchcraft, and ignorance. Along with others he is opposing the advance of communism which, if it ever wins in China, may sweep all over Asia and bring the dark ages back to Europe and the world. Greatest of all the tasks of the medical missionary is the one of helping make Christianity known to a nation now living in heathen darkness. This work may even be of some benefit to our own land, for General Douglas Haig said that Christianity was the sole hope of world peace.

CASE REPORTS AND CLINICAL SUGGESTIONS

RECOVERY FROM INFANTILE PARALYSIS FOLLOWING MALARIAL PAROXYSMS

CASE REPORT

J. E. KNIGHTON, M. D.

SHREVEPORT, LA.

In view of the frequent occurrence in medical literature during recent years of favorable results being obtained in cases of paresis by malarial infection, it has occurred to me that the following case report might be of interest.

The patient, aged 13 years, female, white, was admitted to the Tri-State Hospital, of Shreveport, Louisiana, on December 24, 1930.

Three days before admission, she became ill, complaining of aching limbs and back, and rather severe headache, and slight elevation of temperature. On the second day of the illness she was seen by Dr. Keator of Bermuda, who found the above symptoms somewhat more pronounced and the physical examination showed rather marked soreness and rigidity of the muscles of the neck. No paralysis was noted at that time. She was referred to the hospital for further observation.

Physical examination showed a well developed and well nourished child. The interesting features of the examination were as follows:

The head was drawn backward and the muscles of the neck were quite rigid. The pupils were rather markedly dilated but reacted promptly to light. The chest showed nothing abnormal. The abdominal organs were not palpable nor did percussion reveal any increased dullness over spleen or liver. There was no marked rigidity of the muscles of the abdomen. The upper limbs showed no impairment of power or motion, and the reflexes were normal. There was almost complete loss of power in the lower limbs and sensation was definitely impaired. The knee jerk was present but feeble. This was completely absent the following day. There was no ankle clonus.

Rectal and vesicle sphincters were involved as indicated by inability to retain fluids by enema and retention of the urine.

Laboratory examinations showed the following: Urine, rather heavy trace of albumen, few pus cells and an occasional granular cast. The white blood count was 13,350, neutrophiles were 75 per cent, small lymphocytes 22 and large 3. Spinal fluid showed a cell count of 439, there being 419 lymphocytes and 20 polynuclears. There was a marked increase in globulin. The smear was negative for organisms and the culture was sterile. Wassermann test was negative.

Patient was kept at complete rest under the influence of bromides. The rigidity of the neck gradually disappeared and the elevation of temperature subsided within a few days.

She was permitted to return home on the twelfth day after admission with general condition good, but the paralysis of both lower limbs was complete and she was still unable to void the urine.

A follow up report was to the effect that the condition remained practically unchanged for about six weeks. At this time she had a severe chill which was followed by high temperature. The doctor in charge regarded this as a malarial paroxysm as the family lived in a locality where malaria was endemic and one or two other members of the family had similar paroxyms at the same time. No blood examinations were made but the symptoms subsided under the administration of quinine. However, the patient under consideration had repeated paroxysms on the seventh and fourteenth days, but under vigorous antimalarial treatment there was no recurrence after that date.

The most interesting feature in connection with the case, is that soon after the first malarial paroxym, the paralysis began to improve and within ten days after this initial chill and high temperature, the recovery was practically complete.

I had the privilege of examining the child on April 1, 1931. At this time there was no remaining evidence of paralysis. The muscular tone was good, sensation was normal, there was normal control of bladder and bowels, and the reflexes were normal.

Subsequent reports are to the effect that she has remained free from any of the usual sequellae of acute poliomyelitis.

The following questions may suggest themselves:

1. Was recovery due to the malarial infection acting in some specific manner, or would the same results have been obtained by any other agent which would have caused high temperature?
2. Did the administration of quinine produce the results?
3. Was this simply one of the rare cases in which a complete spontaneous recovery occurs?

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MEDICAL NEWS

The letter that is published in the Louisiana section of the journal addressed to the Parish and District Secretaries and written by Dr. Talbot, Secretary-Treasurer of the Louisiana State Medical Society, is of such pertinent value that we cannot forbear commenting on it. Dr. Talbot points out very accurately that the cohesiveness and binding together of the medical profession is in good part maintained by knowledge of what the men are doing in the profession as a whole. This applies not only to their scientific attainments, to scientific writings and to hospital meetings, but also to the more personal relationships of life. If it is known that so and so is doing this or that, a closer bond is forged when it is realized that what one man is doing or what groups are doing can be duplicated elsewhere with a consequent advancement of scientific medicine or social medicine.

By the same token, speaking from a more or less selfish point of view, the reporting of the medical, personal and social activities of a group enhances the value of a medical journal or of any publication which combines science with news. We have no doubt but that the Mississippi section of this journal is turned to first when the Mississippi doctor tears off the wrapper of the magazine. Dr. Lippincott has been doing splendid work in Mississippi and has stimulated and aroused his correspondents so that they are reporting the activities of their medical communities and letting the other fellow know what is going on in their region. As a matter of fact Dr. Lippincott's section is commented upon favorably by medical editors throughout the country and is held as a standard of what is being done and can be done in this line of medical reporting. It is our earnest hope and wish that Louisiana physicians who are acting as secretaries for their Parish and District Societies will cooperate and help Dr. Talbot in his endeavor to add to the interest of the Louisiana news section of the journal. A few of the secretaries send us regularly news of their meetings. They are to be thanked. Unfortunately their number is few and their contributions relatively limited.

The criticism has been made that often news in the Journal is not fresh but on the contrary has been spoiled by its tardiness in publication. This is true but it must be remembered that the journal is not a newspaper nor can current activities be reported within twenty-four hours. It takes ten days for the journal to go through the

press, for the galley proof and the page proof to be corrected and set up. This accounts for the delay in the publication of some items; on the other hand sometimes news notes are sent to us some weeks after the occurrence or the event has taken place. Subject to the limitations of the ten-day period all news matter is published as soon as it is received and appears in the next succeeding number of the journal.

UNITED STATES MORBIDITY REGISTRATION

There has been proposed the registration of sickness throughout the United States. This morbidity registration will correspond to the weekly health index of deaths in the United States registration area, issued by the Department of Commerce. Publication of such statistics will be of great value to health officers, and will be of interest and well worth while for the practitioner of medicine.

The United States Public Health Service has rated the various state morbidity reports now issued and has seen fit at present to qualify only twenty-six of the forty-eight states in the Union. The failure of the remaining states is due to the incomplete reporting of the so-called reportable diseases. The standard upon which it was judged that reporting was incomplete, is the ratio between the number of deaths to the number of cases. In other words, it is conceived that for every 106 cases of measels there will be one death, or one death of scarlet fever for every 78 cases reported, and one death for each 11 cases of diphtheria. These minimum ratios, in order to qualify, are to extend over a three-year period. The logic of this method of computing accuracy of morbidity reports is open to question. It takes into account the fact that all deaths are reported, and then assumes that for each death there will have to be a certain number of patients who will get well. Of course these standards are not high, but do afford a working basis upon which to judge the accuracy of the reporting of contagious diseases. Incidentally, in those states in which the registration is conceded to be reasonably thorough, the individual physician is entirely responsible. In the states that do not have acceptable morbidity statistics, it is safe to assume that there is considerable laxity in the reporting of those diseases which are classified as reportable. The doctors of Mississippi and Louisiana should note this and should be extremely punctilious in the reporting of those diseases which the State Boards of Health require notification.

TREATMENT OF LEAD POISONING

One of the very fascinating results of the study of lead poisoning by Aub and his associates was the development of a method of treatment of acute plumbism which has been found of extreme value. Acting on the supposition that lead is deposited in the bones in the same manner as lime salts, the individual with acute lead poisoning is found to react almost miraculously in the relief of pain, by the slow injection of 10 c.c. of sterile five per cent solution of calcium chloride, the lead being deposited with the calcium in the osseous system. With the subsidence of the acute symptoms the deleading of the patient's bones is begun with a diet low in calcium, and which should not include any milk and only these vegetables and fruits: tomatoes, corn, potatoes, apples, and bananas. The elimination of lead proceeds rapidly as the calcium and lead are pulled from the bone when the negative calcium balance is established.

The correlation of data obtained in experimental investigations sometimes seems almost miraculous. Shelling* says that it has been shown that in experimental rickets a diet containing too much or too little calcium will result in rickets unless the ratio of the calcium to the phosphorous is about 1:1. The fact that occasionally the

*Shelling, David H.: Effect of Dietary Calcium and Phosphorous on Toxicity of Lead in the Rat: Rationale of Phosphate Therapy. Proceedings of the Society of Experimental Biology and Medicine, 30:248, 1932.

deleading of individuals with lead poisoning is not satisfactory, can be explained upon the fact that calcium may be given in the form of salts without sufficient phosphorous. If ample phophorous is not given, as in rickets so in plumbism the lead can not be eliminated as an insoluble phosphate, nor can the lead be deposited in the bone unless there is a sufficient amount of phosphate present. Shelling has proven this beautifully in a series of experiments with rats poisoned with lead carbonate, and the application of his results confirm Aub's idea concerning the treatment of lead poisoning but under a somewhat different mechanism. Aub's diet contains a sufficient amount of phosphate to make insoluble salts of calcium and lead, but others, who have not appreciated the importance of the phosphorous factor in the deposition and the secretion of lead, have given calcium salts without sufficient amount of phosphorous and have not had the anticipated satisfactory results.

HOSPITAL STAFF TRANSACTIONS

CHARITY HOSPITAL VISITING STAFF MEDICAL SECTION

The regular meeting of December 20, 1932, was called to order by the chairman and routine business was dispensed with; also the program and case presentations.

Upon motion of Dr. Ralph Hopkins, seconded by Dr. Amedee Granger, resolutions as follows were adopted by the Medical Section and spread upon these minutes, with the direction that a facsimile of this page be forwarded to the mother of our confrere, Dr. Henry Daspit, and through her communicated to his other surviving relatives:

WHEREAS, the Creator, in His infinite wisdom, has seen fit to remove from our midst our esteemed friend and colleague, Dr. Henry Daspit, and;

WHEREAS, we of the Medical Staff of the Charity Hospital of Louisiana, who survive him shall be deprived of his kindly help and guidance;

THEREFORE, be it resolved—that we make this expression of our bereavement, with instructions to the Secretary that a copy be spread upon these minutes and that a facsimile of this page be sent to his mother.

Upon motion of Dr. Suzanne Schaefer, seconded by Dr. A. L. Levin, the meeting was unanimously adjourned in tribute to our departed friend.

Morris Shushan, M.D.,
Secretary.

W. A. Love, M.D.,
Chairman.

CHARITY HOSPITAL MEDICAL STAFF MEETING

On January 7, 1933, Dr. Love presided at the regular monthly meeting of the Medical Section of the Charity Hospital Staff. Dr. Howell demonstrated a case of dermatitis diagnosed as mycosis fungoides. While not typical clinically, a biopsy had shown the characteristic pathology of the condition. The microscopic slide of the biopsy was shown by Dr. Von Haam. Dr. Howell also showed a patient with erythrema multiforme, and one of juvenile pemphigus. The presentation was discussed by Dr. Roussel.

Dr. Wirth showed a case in which a clinical diagnosis of carcinoma of the stomach with metastasis to the liver had been made. Clinical laboratory and roentgenological findings supported this diagnosis, although the roentgenological findings presented some peculiarities. In addition there was a question of systemic syphilis, and the additional clinical diagnosis of chronic nephritis, arteriosclerotic heart disease with decompensation, and aortitis. Dr. Miles discussed the roentgenograms and gave his impression that there was a carcinoma on the posterior wall of the stomach in the prepyloric region, probably with a polypoid mass extending into the cavity of the stomach. Dr. Granger stated that he thought the mass might be retroperitoneal, and not in the wall of the stomach itself.

Dr. M. W. Miller showed a patient with amebic dysentery. This negro male also had definite gastric symptoms suggesting peptic ulcer. No gastric intestinal series had been reported upon as yet, so that the question was still undecided.

Dr. Hobson presented a case of pellagra, which, while giving a very typical history of the disease, including a period of mental confusion, did not show very typical skin lesions.

There then followed a presentation of gross and microscopic specimens by Dr. Von Haam. Among these were included a case of acromegaly, melanocarcinoma with marked metastasis including to the brain; pyelophebitis of the colonic mesentery; single myeloma of the vertebra; and carcinoma of the esophagus.

Willard R. Wirth, M.D.

HOTEL DIEU

The staff of Hotel Dieu met on December 21, 1932, with the President, Dr. Joseph A. Danna, in the chair, and the Secretary, Dr. Julius E. Isaacson, at the desk.

Dr. A. Mattes presented a paper on "Transurethral Treatment of Prostatic Hypertrophy." The conditions of the prostate were classified. This was followed by a description of the type of instruments used, from the original one devised by Amussat in 1836, that by Bottini in 1873, by Guthrie in 1834, by Young in 1909, up to the present day instrument. This paper reviewed the literature dealing with the subject by leading authorities in America, citing their technique.

Case reports, with an analysis of three deaths followed.

Dr. Mattes closed with the following remarks: "Resection is as grave a procedure as any major surgical operation, and requires expert care, careful post-operative supervision, and no handling of catheters by patient or intern. Infection within forty-eight to seventy-two hours post-operatively usually means death if resection has been extensive or the bladder foul. The value of this procedure has been attested to by many. The method is here to stay. Let us study our cases more closely and apply the simplest treatment for present drainage, forgetting the method of attack."

Dr. R. Gordon, discussing this paper, said: The ideal type for resecting is, of course, the median lobe; the Davis-Bovie unit with the McCarthy electrotome is probably the best instrument. The so-called senile sclerotic prostates, (the small fibrous prostrates which are almost impossible to enucleate) and some types of malignancy, along with prostatic bars, are ideal for the use of this type of instrument.

It is necessary to stop resection when you see the veru-montanum. In the case of neoplasms and the other types of obstruction, I have mentioned, with this instrument it would be perfectly feasible to cut a channel through; but with the large prostates, of which I had one case weighing 4½ oz., filling almost half the bladder,—this type of instrument is useless. The rectum may be entered, or the bladder may be cut if the proper precautions are not taken, along with injury to the vera and sphincter. What occurs most often is lack of control of urine afterward.

This procedure should therefore be done by only a competent cystoscopist who knows just what steps to take, and the best type of instrument for each case.

Dr. Max M. Green stated: We have used this instrument on all types of prostate. The procedure (used in thirty-seven hospital cases) carried a mortality of 13½ per cent compared to 17½ per cent in ordinary two-stage prostatotomies. Hospitalization was reduced to about half. Six of these cases required re-operation, two because of faulty instruments, and four because proper results were not obtained within two or three weeks. In this group there were four cases of incontinence, one of which has lasted four months; three have gradually recovered control of urine.

In private practice I have four cases of prostatic resection; 15 grams were removed from one, and 3 grams from each of the others. All three are getting along satisfactorily.

Second on the Scientific Program was a case of Fracture of the Pelvis presented by Dr. J. C. Menendez. This fracture occurred from a fall of forty-five feet, the man having struck his right hip on a steel shaft after falling thirty-five feet. He was confined in bed four months, with six months additional treatment. Routine fracture treatment was given. Fortunately he had no bladder complications.

The patient was declared legally to be unfit for manual or hazardous labor for the rest of his life; but one year following the accident he returned to work both laborious and hazardous. He has only an area of anesthesia over the right gluteal region, and a slight shortening of the right leg, which is compensated for by the pelvis, and a slight elevation of the shoe heel on that side; he walks practically without a limp.

X-ray pictures (taken after four years) show an upward displacement of the right innominate bone at the sacro-iliac articulation, with displacement and separation of the symphysis pubis of 3¼ inch, with spicules of bone at two points in this region. There were also fractures of the pubic bones (descending ramus).

At a recent A. C. S. meeting, 4000 cases of fractured pelvis were discussed. It was stated that, irrespective of type of fracture, with or without complicating injury to bladder, urethra, rectum or other organs, treatment is simply rest in bed with or without some fixation. Results in all cases were excellent functionally, even though apparently frightful deformities had been present. Naturally, all complications to soft parts and viscera were treated as developed.

Irrespective of the degree of deformity, these cases should not present permanent disability. Functional results are more important than anatomical positional results.

Dr. R. Gordon: In conjunction with Dr. LaNasa I treated a case at Charity in which the fracture was similar to this, except that one of the rami of the symphysis, at the time of the accident, had been severed, causing stricture of the urethra—part of the bone puncturing it.

Patient had a suprapubic tube in when he came to the hospital. Several consultations were had and the consultants decided to have him retain

the suprapubic tube, saying nothing could be done. He was getting around well. After a few weeks we did an external urethrotomy and inserted a catheter. The catheter was later removed and the urethra was perfectly healed. It is remarkable how he got around with a pelvis that bad.

Another accident case was a white girl whose bladder had been punctured by a very small spicule of bone. Cystoscopy showed only a very small puncture. A small inswelling catheter resulted in a complete recovery.

Executive session followed, and the following officers were elected and inducted into office to serve for the year 1933: Dr. P. Leonce Thibaut, president; Dr. Peter B. Salatich, vice-president; Dr. Ruth Aleman, secretary-treasurer; Laboratory, Dr. Lucien Fortier; additional members of the Board: Dr. Joseph A. Danna, Dr. Val H. Fuchs, Dr. J. E. Isaacson, Dr. Walter Otis, Dr. John Smyth, and Dr. George J. Taquino.

The meeting adjourned at 9:45 P. M.

TOURO INFIRMARY STAFF MEETING

The regular clinical meeting of the Medical Staff of Touro Infirmary was held Wednesday, January 11, 1933, at 8:00 P. M. Since the annual report was to be made and the annual election held at this meeting, only one case report was presented.

Dr. Gilbert Anderson showed a patient who had been injured in February, 1932, by a blow on the head with a falling log. The patient had been in coma for about seven weeks, and there was a depressed fracture. The patient had injury of the left third cranial nerve, and in November had a severe convulsion. Following this episode, the patient was referred to Dr. Anderson for treatment. At operation there was a large depressed area in the left frontal region, with a cyst about as large as a lemon. The bone that had been removed was replaced as a bone graft. On the fifth day the sutures were removed, and on the twelfth day the patient was about ready to go home when he suddenly began to have high fever. The wound was opened and a large quantity of thick yellow pus drained from the wound freely. This was treated conservatively, and the patient made an uneventful recovery without a loss of the bone graft. The ptosis of the left eye is still present, as is also the left fixed pupil, but the diplopia is no longer present. Dr. Landry discussed a case of epilsepsy due to depressed fracture which he had operated about some years ago without any relief of the epilepsy.

Dr. Womack made a final report in the case of cerebrospinal rhinorrhea which he had previously presented to the staff. This patient failed to return to the clinic, and after a follow-up investigation it was found that she had died in coma without fever. The exact cause of her death was, therefore, undetermined.

There then followed the annual report of the Executive Committee, prepared by the secretary and read by the chairman, Dr. Urban Maes. Among the things discussed and decided upon by the Executive Committee was the matter of holding a joint annual meeting with the Orleans Parish Medical Society, which will probably be arranged. Various other matters of interest to the staff were enumerated.

The annual election resulted in unanimous reelection of the two members to the Executive Committee.

Following the meeting, refreshments were served.

Willard R. Wirth, M. D.

STAFF MEETING OF THE MISSISSIPPI BAPTIST HOSPITAL, JACKSON

The staff of the Mississippi Baptist Hospital met January 3, at 6:30 P. M., in the dining room where a delightful meal was had. Afterwards the minutes of the previous meeting were read. Drs. Verner and Henry were proposed for membership and their names were referred to the membership committee.

The annual report of the hospital was summarized by the superintendent and was very interesting to the staff. It showed some excellent management on the part of himself. The remarkable cuts in the running expenses over the previous year were shown.

Drs. Wall, Wilde and Sheffield were the committee appointed to draw up resolutions regarding the death of the late Dr. T. J. Crofford. The resolutions were unanimously adopted.

Dr. V. D. Hagaman was accepted as a member of the staff at this time.

Dr. T. W. Kemmerer read a paper on the Kline-Young Microscopic Flocculation Test and the Wassermann Test. The paper was freely discussed by Mr. Palmerlee and Dr. Wilson.

Dr. F. E. Rehfeldt reported the treatment of five cases of tularemia by the use of metaphen in ten c.c. doses intravenously, given every other day for six doses. In five cases treated the high temperature and swollen glands all disappeared promptly on the administration of the drug and since there is very little to be found on the treatment of this disease this report was taken eagerly by the staff.

The program committee for the next meeting was appointed as follows: Drs. Russell, Sheffield, and Batson.

Lawrence W. Long, Secretary.

Jackson,
January 12, 1933.

Abstract: The Kline-Young Microscopic Flocculation Test and the Wassermann Test.—Dr. T. W. Kemmerer, Director of Laboratories, Mississippi State Board of Health.

The flocculation test is more sensitive than the Wassermann test. It becomes positive earlier than the Wassermann test. It remains positive longer than the Wassermann test in treated cases and also in old relatively inactive cases. Neither a negative Wassermann nor a negative flocculation test excludes syphilis. Neither test is positive during the first few days of the primary lesion. The Wassermann test may become positive as early as the end of the second week after the appearance of the primary lesion or it may not become positive until the sixth week. The flocculation test will rarely be positive before the second week, but frequently it will become positive while the Wassermann is still negative. Under treatment the Wassermann tends to become negative rather rapidly—to become positive again if treatment is discontinued. The flocculation test will become negative under treatment much less rapidly than the Wassermann test. Neither test is to be taken as a criterion of cure during or shortly after discontinuance of treatment.

The Wassermann test will give false positives, so-called. This term is a misnomer; the test itself is not a false positive but the cause is other than syphilis. There is less tendency at present than formerly to stress leprosy and some other diseases as causes of positive Wassermanns, with the exception of yaws, and the authorities do not yet agree as to whether yaws is or is not syphilis. The usual cause of false positives is the growth of bacteria in the blood specimen. When the specimen can be placed in the refrigerator as soon as coagulation is complete and kept there until the test is made, no particular precautions to prevent contamination are necessary. But when this is impossible such precautions are necessary. It is impossible under "field conditions" to draw blood with a syringe and introduce it into a bottle without getting contamination in a fairly large number of cases. A Keidel tube should be used.

The flocculation test does not appear to give false positives with specimens contaminated by bacterial growths. When the Wassermann test is positive and the flocculation test is negative, repeated tests usualy demonstrated that the Wassermann was a false positive. But occassionally the Wassermann remains persistently positive and the flocculation test persistently negative. Such evidence as is available seems to indicate that in these cases the Wassermann test is not a false positive. This may be comparable to the instances in the Wassermann test in which the less sensitive antigen gives a positive reaction while the more sensitive antigen gives a negative reaction and which usually occurs in very early primary cases. The cause of this type of reaction is not known but it is not an example of the "zone phenomenon."

Kline says the flocculation test never gives false positives. I would not like to make such a broad statement concerning any test. It has been stated that the flocculation test will give a false positive in rapidly advancing tuberculosis and massive destruction of tissue.

The degree of positiveness of either the Wassermann or the flocculation test should not be taken as a measure of the degree of the infection or the progress of the treatment. The degree of positiveness of the test should be taken as a measure of the reliance which should be placed upon it, that is, the more strongly positive factor.

In my opinion the flocculation test requires more skill and judgment in interpretation than the Wassermann test and for ordinary routine work, if only one test is used, it should be the Wassermann. The flocculation test is an excellent check on the Wassermann test particularly as it picks out the false positives due to bacterial contamination. The regular flocculation test is not suitable for spinal fluids. The special flocculation test for spinal fluids is probably too liable to error for it to be used in routine work. I had hoped that the flocculation test on the blood would be sensitive enough to be positive in those cases in which the Wassermann test on the blood is negative and that on the spinal fluid is positive. But this is not the case. Tests on the spinal fluid are essential, especially in detecting those cases which in later years may develop into neurosyphilis.

STAFF MEETING OF THE VICKSBURG SANITARIUM

The regular monthly meeting of the Vicksburg Sanitarium and Crawford Street Hospital was held on Monday, January 9, at 6:30 P. M. After a consideration of the business of the staff and Reports from the Records Department and Analysis of the Work of the Hospital, Dr. F. M. Smith, Director of the Warren County Health Department, discussed the prevalence of malaria during the year of 1932 and showed a map which indicated locations of cases.

Dr. R. A. Street, Jr., presented a special case report: Generalized Peritonitis in a Colored Female.

Three Minute Reports of the Literature of the Month were given as follows:

1. Dr. G. M. Street.—Sterilization by Intramuscular Injection of Semen.

2. Dr. A. Street.—Protracted Radiation with Heavily Filtered High Voltage X-ray in Malignancies.

3. Dr. L. S. Lippincott.—Post-Mortem Findings in Hookworm Disease.

4. Dr. J. A. K. Birchett, Jr.—Surgical Treatment of Divided Nerves and Tendons of Forearm and Hand.

5. Dr. L. J. Clark.—Potassium Sulphocyanate for Painful Crises of Sickle Cell Anemia and Present Status of the Ketogenic Diet.

6. Dr. G. C. Jarratt.—Methylated Antigen in Extra Pulmonary Tuberculosis.

Drs. S. W. and W. E. Johnston presented motion pictures as follows:

1. Salpingo-Ophorectomy with Appendectomy.
2. Orchidopexy with Hernioplasty and Varicocelectomy.

The next meeting of the staff will be held on Friday, February 10, at 6:30 P. M.

Abstract: Generalized Peritonitis in a Colored Female.—Dr. R. A. Street, Jr.

Patient.—Colored female, aged 34 years, laundry worker; admitted to the Sanitarium December 17, 1932.

Chief Complaint.—Pain in right lower quadrant of abdomen; foul vaginal discharge; fever; loss of strength and appetite.

History of Present Complaint.—Began three weeks ago with vaginal discharge, moderately profuse, gradually increasing in amount and becoming foul. At first dull ache in lower right quadrant; about one week ago pain became so severe that patient had to go to bed. Pain was then accompanied by fever, loss of appetite, nausea; later some vomiting of stomach contents. Normal menstrual period two weeks ago. Was told by physician that she had "pus tubes"; rest and cold applications advised; prescription given. Fever continued and there was no improvement. Bowel movements regular up to several days ago, no movements since. Has taken only small amounts of liquid food for past three or four days. Nausea becomes worse at times; vomiting is never flocculent or large in amount.

Past History.—Has had two miscarriages, one at three months and one at four months, last three years ago. Family history not remarkable.

Physical Examination.—Temperature 101°F.; pulse 112, rapid and weak; respiration 18; blood pressure 100/60. Very acutely ill; warm, moist skin; lying quietly in bed. Poorly nourished. Sclerae slightly icteric; eyes have moribund appearance. Tongue coated and dry. A few scattered fine rales over both lung bases; breath sounds slightly diminished and rather high pitched over right base posteriorly. Heart sounds regular and rapid.

Abdomen distended, especially in upper part, where there was marked tympany. Extreme tenderness over entire lower abdomen with some muscular rigidity.

Irregular tender mass in lower pelvis, impossible to outline, and acutely tender. No bulging of fornices. Impossible to outline uterus and adnexa because of mass.

Clinical Laboratory.—Urine, catheterized specimen, shows a large trace of albumin and a few pus cells.

Blood shows leukocytes 18,300; small lymph. 6 per cent, large lymph. 10, monocytes 3, polymorph. neutrophils, 81, with 51 immature; no malaria found; sedimentation test showed slight to moderate activity. Wassermann, Kline and Young, and Kahn tests, negative.

Course.—On admission patient was given 1000 c.c. glucose solution by vein. Potassium permanganate douches were given every four hours. For several days patient seemed to improve. Daily enemas gave good results; there was no evidence of any consolidation in either lung. Abdomen remained distended, but liquids were well taken. On the fourth day (Dec. 21), patient became much worse with abdomen more distended and painful and temperature higher. A small tube was put into stomach and left for washing; glucose solution was given subcutaneously. Retention enemas of eight ounces of glucose solution were begun; always a highly colored reflux was obtained. The pulse became weaker and more rapid. On the next night (Dec. 22), patient became cold and pulse weak, but revived somewhat on application of heat and stimulation. On December 24 patient became delirious and died. At no time was condition such as to warrant operative procedure.

Permission to perform post-mortem examination of abdomen and pelvis was obtained. Peritoneal cavity was filled with thick, white purulent fluid, and a general fibrinous peritonitis was present. Examination showed no cause for the condition. Sections taken from the organs of the abdomen and pelvis and examined microscopically showed no source of peritoneal infection.

Remarks.—This case is presented as one of those occasionally met in which general peritonitis without demonstrable reason is apparently the cause of death.

TRANSACTIONS OF ORLEANS PARISH MEDICAL SOCIETY

CALENDAR

February 1—Clinico-Pathological Conference, Touro Infirmary, 10:30 A. M. to 11:30 A. M.

February 3—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

February 3—Physiology Seminar, Tulane Medical School, 5 P. M.

February 6—Eye, Ear, Nose and Throat Hospital Staff, 8 P. M.

February 8—Clinico-Pathological Conference, Touro Infirmary, 10:30 A. M. to 11:30 A. M.

February 8—Touro Infirmary Staff, 8 P. M.

February 10—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

February 10—Physiology Seminar, Tulane Medical School, 5 P. M.

February 10—French Hospital Staff, 8 P. M.

February 13—ORLEANS PARISH MEDICAL SOCIETY, 8 P. M.

February 15—Clinico-Pathological Conference, Touro Infirmary, 10:30 A. M. to 11:30 A. M.

February 15—Charity Hospital, Surgical Staff.

February 16—Eye, Ear, Nose and Throat Club, 8 P. M.

February 17—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

February 17—I. C. R. R. Hospital Staff, 12 Noon.

February 17—Physiology Seminar, Tulane Medical School, 5 P. M.

February 20—Hotel Dieu Staff, 8 P. M.

February 21—Charity Hospital Medical Staff, 8 P. M.

February 22—Clinico-Pathological Conference, Touro Infirmary, 10:30 A. M. to 11:30 A. M.

February 24—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

February 24—Physiology Seminar, Tulane Medical School, 5 P. M.

During the month of January, besides the joint meeting of the Old and New Boards of Directors, the Society has held the annual Installation Meeting and one Scientific Meeting.

At the Installation Meeting the retiring President, Dr. John A. Lanford, read his report and Dr. E. L. King gave his inaugural address. The Very Rev. Wm. H. Nes, Dean of Christ Church Cathedral, New Orleans, was the orator of the evening and gave a most interesting talk on Science, Religion and Reality. All addresses were very well received.

The following officers for 1933 were installed:

President—Dr. E. L. King.

First Vice-President—Dr. Waldemar R. Metz.

Second Vice-President—Dr. W. R. Buffington.

Third Vice-President—Dr. Theo. F. Kirn.

Secretary—Dr. Frederick L. Fenno.

Treasurer—Dr. Walter P. Gardiner.

Librarian—Dr. Alton Ochsner.

Dr. Gilbert C. Anderson.

Dr. Val H. Fuchs.

Dr. John A. Lanford.

At the meeting held January 23 papers were presented by Drs. James T. Nix and Allan Eustis. The annual reports of the Secretary, Treasurer, Librarian, Special and Standing Committees for 1932 were read at this time. The reports of the Secretary, Treasurer and Librarian were referred to their respective Report Committees for action on their recommendations.

The committees appointed to study the various phases of abuse are still working.

The dues for Active Members for 1933 were reduced from $18.00 to $12.00 per annum. It is requested that as many as can do so pay their dues in full in order to relieve the clerical work in the office of collecting these dues. Make checks for $19.00 payable to the Orleans Parish Medical Society which amount includes your annual dues for the Louisiana State Medical Society. Your Medical Defense does not begin until we receive your check for your State dues. PLEASE DO THIS AT ONCE.

Dr. Daniel N. Silverman has been appointed Chairman of the Scientific Essays Committee for the year 1933, and he is very anxious to prepare his programs. Any member desiring to read a paper before the Society during this year will please send in the title of his paper and the name of the doctor he wants to open the discussion.

TREASURER'S REPORT

ACTUAL BOOK BALANCE, 11/30/32	$ 844.93
Receipts during December	1,881.09
	$2,726.02
Expenditures	1,157.41
ACTUAL BOOK BALANCE, 12/29/32	$1,568.61

LIBRARIAN'S REPORT

One hundred and twenty-two books have been added to the Library during December. Of these 48 were received by gift, 72 by binding and 2 from the New Orleans Medical and Surgical Journal. New titles of recent date are listed below.

Material has been collected for doctors on the following subjects:

Calculi of Salivary Glands.

Amebicides—Stovarsol, Emetine, Chinofon and Acetarzone.

Encephalitis following Pneumonia.

Pharyngeal syphilis.

Dermatophytosis and epidermophytosis.

Levine tube and heat tent. Use in post-operative care.

Cysts of the tongue.

Amnesia following injury.

Effect of eclampsia on fetus.

Treatment of peptic ulcer by non-specific proteins.

Mental tests.

Appendicitis in children.

Information furnished as to when Dr. A. H. Jones was licensed to practice medicine in New Orleans (December 10, 1832).

NEW BOOKS—December:

U. S. Army—Surgeon General—Annual Report, 1932.

Modern Hospital Yearbook, 1925-26.

Central States Pediatric Society. Transactions, V. 6, 1931.

Boyd—Preventive Medicine, 1932.

Aldrich—Cultivating the child's appetite, 1932.

Frederick L. Fenno, M.D.,
Secretary.

LOUISIANA STATE MEDICAL SOCIETY NEWS

NOTICE

According to opinion received and the legislation passed at the last Legislature, Louisiana physicians are exempt from the license tax.

A LETTER TO PARISH AND DISTRICT SECRETARIES

Dear Doctor Blank:

In the final analysis, the confidence of the doctors in the medical profession and medical organization is the incentive for the development of the strength or weakness of our organization. Such an analysis looks forward continually with faith and confidence in the future, and attempts to give the character of service which is most satisfactory and helpful to the members we are serving. It is with this thought in mind, as we are starting the New Year, that we make known to you our appreciation of your good will and cooperation during the trying year just completed. We express to you our sincere wish that the year ahead will justify in a large measure the faith that we have and that we hope you have in the continued growth and prosperity of our organization.

We, therefore, hope that you will make every effort possible to fortify and strengthen your organization by increasing your numerical strength as well as intensifying the scientific evaluation of such an organization to its members. In these efforts you may be assured of our desire to cooperate and be helpful in any constructive development of these aims and ambitions. Besides, I think one of the most vital progressive actions would be to have a monthly review published in the Journal of the activities of the parish and district societies, as well as personal mention of the doings and actions of its various members. This material would fortify other activities and serve to increase the interest of the members in the functions of the organization.

We realize that in the past years we have not been as successful as we have desired in the collection of this valuable information. Our Journal is noticeably deficient in medical news and items of our state, parish and district societies, especially in comparison with such material from our sister and adjoining State of Mississippi. We are very anxious to build up this department, with the feeling of service to the members of the organization, and you can depend upon our full cooperation in helping to collect and assemble this material for proper publication. Furthermore, such valuable material serves as historical facts for use in the recording of medical activities, not only in the parishes, but will in the ultimate give us a proper indication of the progress or decline of any particular locality of the State.

The pages of the Journal close on the twentieth of the month preceding the issue. Won't you help us in this regard and have a writeup sent in for publication each month? If it is impossible for you to handle this, would it be consistent to have some one designated in the Society to carry on this function? I think the subject one of immense value and ultimately will prove of intense interest to your Society and the profession.

Wishing you all success for 1933, I am,

Yours very respectfully,
P. T. Talbot, M. D.,
Secretary-Treasurer.

ON THE ROLE OF THE FRENCH PHYSICIANS OF LOUISIANA IN THE MEDICAL AND COLONIAL HISTORY OF THE STATE*

To France, Louisiana owes to this day the most heroic, romantic and colorful periods of her history. To France, she owes all that which is basic in the primodial structure of her social organi-

*Extracts from an address delivered by Dr. Rudolph Matas at the banquet of the French Veterans of the World War resident in Louisiana in commemoration of the Armistice, on November 10, 1932, when the cross of the Legion of Honor was conferred upon him by the French Government.

zation. For over a century, language, government, education, agriculture, industry, architecture, commerce, religion, law, medicine and all the esthetic arts and literature were essentially French, and Louisiana, as typified by New Orleans, was only a reflex or mirror of the visage and soul of France.

To speak only of my own profession, Medicine, it can be safely said that from the establishment of the colony by Iberville and Bienville in 1699, to the year 1834, when the Medical College of Louisiana (now Tulane) was founded by the enterprise of a group of prominent practitioners in New Orleans, among whom figure conspicuously the names of the French Louisianians, Luzenberg and Cenas, the education and the system and methods of medical practice were exclusively French. Even during the thirty-four years of the Spanish interregnum (1769-1800), the French methods of practice remained dominant and uninfluenced except in official documents in which the Spanish language was obligatory.

For nearly half a century after Louisiana had become a part of the American Union, the creole youth, "la jeunesse doree," and in fact all those whose education and resources justified a medical career, all looked to Parish as the fountain source of their inspiration and knowledge. The foremost names in the medical history of Louisiana are directly French or of French-Creole derivation. And it is in this way that not only the science and art of medicine was brought to Louisiana by the French colonial surgeons, but that in later years, and up to the first half of the last century, the principles and methods of French practice prevailed and were cultivated by their Creole descendants. It is they who organized the first boards of health and the medical societies, and who made effective the first laws to regulate the practice of medicine. They also published in French the first contributions to the literature and progress of Medicine in this State.

Quite apart from the distinguished record of the French colonial surgeons who were sent by the French government to Louisiana in their official capacity, the greatest credit is due to their Creole descendants who, educated in France, cultivated and diffused the French language which they spoke and wrote as their native tongue, and often with a purity, perfection and elegance that made them as fit for the orator's tribune as the National Assembly in France or for the lecturer's platform, as the best of the Parisian conferenciers at the Sorbonne.

It is not surprising, therefore, that the French literature of Louisiana should find some of its most brilliant exponents in the medical profession.

Suffice is to recall the great names of Alfred Mercier, novelist, essayist; poet and one of the most learned of classic scholars—the founder and perpetual secretary of the Atheneé Louisianais; also his distinguished brother Armand, its first president, in 1876, who was one of the most brilliant surgeons of his day.

It is notable that the two brothers, despite their large clientèle, found time to devote to the culture of literature. The foundation of the Athénee brought to light many medical intellectuals who flourished in this metropolis and in the country parishes of Louisiana. Notable among whom were Delery, Testut, Fortin, Turpin, Faget, Dell Orto, Huard, Dupaquier, pere et fils, Sabin Martin, Devron, Castellanos, J. M. and P. Durel, Hava, Layton, Formento, Souchon, Bayon, Borde, Touatre, and in the French speaking parishes, Blanchet, Duperier, Sabatier, Francez, Pavy, Geraud, Lambremont and that eminent Canadian of French descent, McGuire—and still so many others who apart from their purely professional attainments shed honor and lustre on French culture in Louisiana, in language, science and letters.

Incidentally, let me recall that one of the noblest and most enduring monuments of the French and Spanish regime is our Charity Hospital which was founded in 1739 by Jean Louis, an humble French sailor who left all his life savings for a hospital where the poor could be treated for charity.

Again, it is pleasing to refer on this occasion to Francois Marie Prevost,† the greatest hero in the medical history of Louisiana. He was a French colonial surgeon, who, having emigrated from San Domingo at the time of the negro rebellion, settled in Donaldsonville, Parish of Ascension, in the beginning of the last century, about 1800 or 1801, at that time a mere hamlet in a plantation settlement. It was there that this intrepid and skillful surgeon was the first to perform the cesarean operation in North America. He performed the operation on negro slaves suffering from pelvic rachitic deformities, thereby saving many otherwise doomed mothers and unborn babies by an operation, which, at that time, had been condemned as too hazardous by the greatest authorities in the surgical world.

His courage, enterprise and skill were rewarded by the most unprecedented success, but yet so modestly regarded by him that the surgical world remained ignorant of his achievements for over half a century; and, when we consider that Prevost operated in the most primitive surroundings, in negro cabins, without anesthetics, antiseptics, adequate instruments or trained assistants, his operations must be regarded as extraordinary achievements which place him in the front rank of the world's great pioneers in abdominal surgery. He will remain a heroic figure in our history

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†Born at Ponts de Ca, near Angern, France, in 1764; died in Donaldsonville in 1852.

and a great honor to the French traditions of Louisiana.‡

Nor can I omit even in this hurried reference to the accomplishments of the physicians of Louisiana who have won a right to be regarded as the benefactors of its people, the name of Jean Charles Faget. Faget had graduated with great distinction in Rouen, the home of his ancestors, and when he established himself in New Orleans, he was at once recognized as a profound scholar and savant by his confreres in the profession. It was he who introduced the thermometer in medical practice in Louisiana and by his studies definitely established facts of great diagnostic importance in yellow fever which constitute what is known as Faget's laws. He was among the first to relieve parturient women of the pangs of labor by the anesthetic use of chloroform. By this alone, his name is worthy of enduring and greatful memory by the suffering motherhood of Louisiana.

I could go on almost indefinitely with an account of the role played by the French physicians of Louisiana and of their French speaking descendants, in the history of medicine and in the civilization and intellectual development of this State. But I have said enough even in this passing survey to show that in this respect, Louisiana stands conspicuously alone in the Sisterhood of the American States as an example of the fundamental cast of her Latin civilization and in the fact that from the very beginning of its colonial existence the people of Louisiana benefitted by the presence of a highly cultured class of medical practitioners who, trained and educated in the best French schools brought with them not only all the resources of the healing art, but also that European culture and refinement that was denied the majority of the practitioners of medicine who developed in the early and formative period of the Southern and Western States.

IBERIA PARISH MEDICAL SOCIETY

The annual meeting of the Iberia Parish Medical Society was held in the office of Dr. B. L. Stinson, New Iberia; Dr. Guy A. Shaw, of Loreauville, presiding.

At the election of officers for the ensuing year Dr. Guy A. Shaw was re-elected President, and Dr. David Turest, of New Iberia, was elected Secretary-Treasurer. These two were also elected delegates to the Louisiana State Medical convention to be held at Lake Charles.

Dr. Henry Allen King, Jr., of New Iberia, and Dr. F. P. Perret, of Jeanerette, were unanimously elected members of the Parish Medical Society.

David Turest, M. D., Secy-Treas.

SECOND DISTRICT MEDICAL SOCIETY

The meeting of the Second District Medical Society was held at the home of Dr. P. A. Donaldson at Reserve, La. The speaker af the evening was Dr. Robert H. Potts, of New Orleans, who read a paper on "Pneumonia." Dr. J. S. Parker, of Reserve, was elected Delegate and Dr. L. O. Waguespack was elected Alternate to the Louisiana State Medical Society meeting. The guests were entertained at a banquet.

The next meeting of the Society will be held at the home of Dr. L. O. Waguespack in Vacherie, on February 16.

SOUTHERN MEDICAL ASSOCIATION NOTES

At the recent meeting of the Southern Medical Association held at Birmingham a number of New Orleans men were honored.

Dr. Homer Dupuy was re-elected Chairman of the Council, and the following men were appointed as Chairmen and Secretary of Sections:

Dr. E. L. King, Chairman of Sections on Obstetrics.

Dr. Daniel N. Silverman, Chairman of Section on Gastro-Enterology.

Dr. W. A. Wagner, Secretary, Section on Ophthalmology and Oto-Laryngology.

Dr. I. I. Lemann, Chairman of the Section on Medicine.

NATIONAL INSTITUTE OF HEALTH

The National Institute of Health, under the control of the Surgeon General of the United States Public Health Service, was created in 1930 as a result of legislation fathered by Jos. E. Ransdell, then a United States Senator from Louisiana. It is an enlargement of the old Hygienic Laboratory, and is the scientific research center of the Public Health Service. Its function is to ascertain the cause, prevention and cure of diseases affecting human beings. The act provided for an appropriation of $750,000, which is now being expended in the construction of two splendid buildings in Washington. It also authorized the Secretary of the Treasury to accept gifts for research in problems relating to the health of man.

Although the financial support for research work has been comparatively small in the past, government scientists have made extremely valuable discoveries concerning such diseases as malaria, pellagra, hookworm, tularemia, undulant fever, psittacosis, typhus, Rocky Mountain spotted fever, and many others.

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‡It is quite definitely ascertained that Prevost performed his first Cesarean section, saving both mother and child in 1822; the exact date, however is undetermined. This would give him priority over the successful operation performed by John Lambert Richmond, of Newton, Ohio, on April 22, 1827. Prevost performed the Cesarean section four times prior to 1832, with three successful results for mother and child.

Recently, and since this address was delivered, the claim for the first Cesarean section in North America has been made for Dr. Jesse Bennet, who operated on his wife, saving her and child, at his home in Morgan County, West Virginia, in 1794. (Louis Frank, proc. So. Surg'l Ass'n, Dec., 1932.)

It is evident that these early pioneers were operating independently and with no knowledge of each other's work.

MEDICAL RESERVE CORPS

From February 12 to 25, 1933, there will be a training period for Medical Department Reserve Officers of the Army and Navy, made possible at the University of Washington Medical School, St. Louis, Missouri, by the courtesy and enthusiasm of the faculty of this school in cooperation with the Medical Departments of the Army and Navy.

The program of the clinics will be under the direct supervision of the faculty of the Washington University. The military instruction, which for the first time includes instruction with reference to the medical service of the Navy, will be under the direct supervision of Colonel George A. Skinner, Medical Corps, United States Army, Corps Area Surgeon, assisted by Lieutenant Commander Reuben H. Hunt, Medical Corps, United States Navy.

Applications for attendance should be forwarded to the Surgeon, Seventh Corps Area, Omaha, Nebraska.

DR. CAZENAVETTE HONORED

Dr. Lionel S. Cazenavette has been appointed Superintendent of the City Hospital for Mental Diseases by Mayor Walmsley. In addition to his duties as superintendent, the holder of this position also becomes the neurologic consultant and expert witness for the City of New Orleans. Dr. Cazenavette is Professor of Neurology at Tulane University, Senior Visiting Physician of Charity Hospital, and neurologic consultant at the Carville Leprosarium.

FRENCH HOSPITAL ELECTIONS

Dr. H. B. Alsobrook was re-elected Chairman of the Staff of the French Hospital. Dr. Martin Miller was elected as Vice-Chairman, and Dr. N. J. Tessitore, Secretary. Dr. Peter Graffagnino was reappointed as Chairman of the Executive Committee, and Dr. W. H. Harris as Chairman of the Standing Committee. Dr. Tessitore becomes Chairman of the Program Committee, and Dr. Miller of the Membership Committee.

NEWS ITEMS

On January 11 Dr. H. W. E. Walther, head of the department of urology, Southern Baptist Hospital, and president of the Social Hygiene Association of New Orleans, addressed the student body of Louisiana State University, in Baton Rouge, his subject being: "The Prevention of Syphilis: A Problem for the Youth of Our Country."

Dr. E. McC. Connelly has been appointed consulting neurologist on the Staff of the Marine Hospital, taking the position left vacant by the death of Dr. Daspit.

Dr. Basil S. MacLean, Superintendent of the Touro Infirmary, has been signally honored by appointment on a small committee of the American Hospital Association to study medical cost and hospitalization plans. The committee is composed of a small group of the outstanding hospital administrators in this country.

Dr. Fred L. Fenno, Secretary of the Orleans Parish Medical Society, has been appointed as Consulting Neurologist to the Eye, Ear, Nose and Throat Hospital.

Dr. Frank J. Chalaron, one of the very active members of the Louisiana State Medical Society and head of the Department of Neurology of the Mercy Hospital, has been elected President of the Staff of the Mercy Hospital.

Dr. Isidore Cohn, Professor of Clinical Surgery with the Graduate School of Medicine of the Tulane University of Louisiana, attended the meeting of the Fracture Committee of the American College of Surgeons held at Philadelphia, Pa., January 14 and 15, 1933.

Assistant Surgeon W. E. Kramer of the United States Public Health Service has been relieved from duty at the Marine Hospital, Galveston, Texas, and assigned to duty at the Quarantine Station, New Orleans.

Assistant Surgeon D. W. Patrick has been relieved from duty at Quarantine Station, Algiers, La., and assigned to duty at the Marine Hospital, New Orleans.

Dr. Adrian S. Taylor, of Birmingham, has been appointed by the Board of Trustees of the Clifton Springs Sanitarium and Clinic as Superintendent and Surgeon-in-Chief of their institution.

The International Congress for the Protection of Childhood will be held in Paris from the fourth to the ninth of July, 1933. The meeting will be divided into eight sections, where such subjects as parental care, early infancy, later infancy, adolescence, and so on, will be taken up.

INFECTIOUS DISEASES IN LOUISIANA

Dr. J. A. O'Hara, President of the Louisiana State Board of Health, in collaboration with the Treasury Department of the United States Public Health Service, has issued morbidity weekly reports, which briefly abstracted contain the following information: For the fifty-first week of the year, ending December 24, the outstanding and marked increase in the number of cases of influenza deserves record. During this week there were 9162 cases reported, as contrasted with slightly under 5,000 the previous week. Despite this large number of cases only 60 cases of pneumonia were reported. Other diseases that appear in double figures were: Seventy-four cases

of syphilis, 33 of tuberculousis, 67 of gonorrhea, 27 of cancer, 23 of diphtheria. One case of typhus fever was reported in this week, as well as 8 cases of small pox. For the last week in the year, there was a magnificent drop in the number of cases of influenza throughout the State, almost 8,000 less cases occurring than in the previous week, 910 being reported. Other diseases that appeared in large numbers include: Thirty cases of cancer, 63 of pneumonia, 41 of tuberculosis, 17 of diphtheria, 16 of gonorrhea, 21 of syphilis, and 11 of septicemia. There were also reported 9 cases of small pox, 2 of meningitis, 1 of poliomyelitis, and 1 of typhus fever. For the first week of the year, ending January 7, there was still a considerable drop in the cases of influenza, 653 being listed for this week. The effects of the influenza of the previous few weeks is shown by the large number of cases of pneumonia that were reported this week, 109 being listed. There was also listed for this week 68 cases of chicken pox, 43 of tuberculosis, 32 of gonorrhea, 20 of syphilis, 23 of cancer, 12 of scarlet fever. Two cases of small pox were reported in this week, and 3 of meningitis. For the second week of the year, ending January 14, influenza had dropped to 560 cases, and only 73 of pneumonia. There were also listed 24 cases of syphilis, 21 of tuberculosis, 22 of diphtheria, and 16 of scarlet fever. The unusual diseases reported this week include 1 case of tularemia, 2 of meninitis, 1 of undulant fever, and 5 of small pox.

HEALTH OF NEW ORLEANS

The Department of Commerce, Division of Vital Statistics, has issued the following weekly reports concerning the health of New Orleans. For the week ending December 10, there were reported in the City 256 deaths, giving a death rate of 28.2 for the total population, and a rate of 23.3 for the white, 40.3 for the colored, as a result of the death of 150 of the former and 106 of the latter. The infant mortality rate this week was 74, 52 in the white and 114 in the colored. The following week, ending December 17, saw a considerable reduction in the total number of deaths in the city, there being 176, divided 109 white, 67 colored, with a death rate of 19.4, 16.9, and 25.5 for the three groups. The infant mortality rate this week was 68. There was some increase in the death rate in the succeeding week, which ended December 24, there being 192 deaths giving a death rate of 21.2. The white deaths were 116 in number, giving a rate of 18.0, and the colored was 76, with a rate of 28.9. The infant mortality rate was 57, with an extremely low rate of 17 for white children, as contrasted with 131 in the negroes. The last week of the year after the subsidence of the influenza epidemic saw a considerable drop in the death rate, it being 16.7 as a result of 152 deaths in New Orleans. The rate of the white population was 15.0, and for the negroes 20.9. The infant mortality rate for this week was 80, 70 for the white, and 98 for the colored. The first week of the new year was characterized by a relatively low rate, being 16.2 for the total population, 14.8 for the white, and 19.8 for the colored, as a result of 150 deaths, the two groups divided 97 white and 53 colored. The infant mortality rate was 62 for this week, showing a reversal of the usual figures, the rate being very much higher, 80, in the white than in the colored race, in which the rate was 31.

SOUTHEASTERN SURGICAL CONGRESS

The fourth annual assembly of the Southeastern Surgical Congress will be held in Atlanta, with the Biltmore Hotel as headquarters, March 6-8, 1933. A splendid list of guest speakers has been provided for this meeting. Included in the list who will present papers are such men as Doctors Orr of Kansas City; Crile of Cleveland; Haggard of Nashville; Jackson of Philadelphia; Cabot of Rochester; Royster of Raleigh; Ochsner of New Orleans; Lewis of Baltimore; and Houston of Augusta. In addition to the prepared papers, most of these speakers will also hold clinics.

CONGRESS ON MEDICAL EDUCATION, LICENSURE AND HOSPITALS

The annual congress on Medical Education, Licensure and Hospitals (composed of the Council on Medical Education and Hospitals of the A. M. A.; the Association of American Medical Colleges; Federation of State Medical Boards of the U. S.; the American Hospital Association) will be held at the Palmer House, Chicago, on February 13 and 14, 1933, when matters of vital importance to American medicine will be considered.

Problems menacing the American medical profession will be presented for solution in this meeting—Contract Practice, Regulation of Specialists, Enforcement of Practice Act and what shall be done with the 1500 American students soon to be graduated from European Medical Colleges (without hospital service, internship, examination for "license" and other privileges granted by these colleges to their native students) and returned to the United States for licensure and practice. Many of these students were too low-grade to qualify for entrance to our Class A colleges. They are sub-standard products.

Through its constituent State Boards, the Federation controls licensure in this country, and it must find a solution for many problems. Therefore it is imperative that every State Board, Bureau of Licensure and reputable medical college shall in this meeting make known its attitude and that of the reputable medical profession of its jurisdiction on the problems to be discussed.

T. J. Crowe, President.
W. L. Bierring, Secretary.

MISSISSIPPI STATE MEDICAL ASSOCIATION NEWS

L. S. Lippincott, Editor

Jacob S. Ullman, Associate Editor *D. W. Jones, Associate Editor*

LET'S BE MORE CHEERFUL

There are a number of black lines in our Mississippi section of the JOURNAL this month. They mark the deaths of some of our confreres. They have performed their duties well. They will be missed. There are a number of other notes that could well be marked with at least shaded lines. Are we getting discouraged? Are we ready to say that we are beaten? Are not the words "depression" and "hard times" being thrown at us too much?

Ought we not to be expressing our thanks that we are alive and doing so well? There were fewer deaths among Mississippi physicians in 1932 than for the two previous years. The average age at time of death is higher. We are living longer. Is not grumbling a rather common fault? How many of us back in those years which we now look upon as "good times" did not think we ought to have even more than we had? Are we really not getting more of the worth while things now than we did then? It is always hard to retrench. But are we not really better for it?

We get nowhere by constantly talking "hard luck." By constant repetition we make ourselves believe conditions are worse than they are. As physicians, we all know that we can make anyone ill by telling him how badly he looks, and, also, by cheerfulness our cures are made the easier. As physicians, constantly lauded as the family friend and consultant, should we not set the example of cheerfulness to others? Should we not be the leaders that start the ball rolling upward?

Let's be physicians in all that the word means, NOW AND ALWAYS.

In the next number of Mississippi News, the word "depression" will not appear.

THE INDIGENT SICK

The present demand for free medical service is one of our important economic problems. It is one of vital interest to the medical profession, and one that should concern the general public if suffering humanity is to be given the advantage that scientific medicine can provide. The medical care of the poor, long considered the responsibility of the physician, has become such a staggering burden that broader shoulders must assume the load.

I am particularly interested in the problem as it affects the community hospital. In the past, when the majority were able to pay their hospital bills, private charity could care for the occasional indigent without undue burden, but the present economic condition has made the indigent patient the general rule rather than the exception. Yet, the community expects the hospital, regardless of conditions, to extend aid at any moment. Day and night it must stand open to receive cases. It cannot be so heartless as to refuse aid while it investigates possibility of payment. It is expected to be the community's health agency, available at all times for all persons. This is as it should be, but if the community wants this institution and its protection to continue, it should see that it is not forced to take care of the community's charity.

What assurance have we that the present economic condition is only temporary. We have lived in hopeful expectation for the past three years and the problem has rapidly become more bewildering. Shall our scientific profession dream on about the good old days, inhaling the anesthesia of current optimism, and watch this little sanctuary of the sick die the marasmic death with which it is threatened? Or shall we arouse to face conditions as they exist and bestir ourselves to pursue the sane and effective course of writing the formula and demanding that the public furnish the ingredients with which to nourish it back into the benevolent institution that it should always remain?

The formula in my opinion is simple. The full cost of the indigent sick should be the obligation of the public at large and should be met through taxation. I am an economist at heart and fear the evils of excessive taxation that are even now beginning to show their ugly heads upon our economic horizon; but I believe the taxpayer, like the plucked goose, would not be so restful if more of the feathers were made into a jacket to protect it against the vicissitudes of life, rather than into a comfort for its master. This is the solution. State, county and municipal governments must recognize this necessary factor in the health of its constitutents and make adequate provision by economizing in less vital fields. I believe that the county should be the unit of organization. Each county should have its community hospital and the county and state should contribute equally to a fund adequate to assure scientific medical care for its indigent sick, in this hospital. Duplication of expenditure for hospital facilities should be guarded against, and the money so appropriated spent only for the actual care of the sick. Sufficient hospital facilities already exist in, or in the approximate vicinity

of each county of our state, to make this plan workable. The control of these hospitals must remain free from political influence and the expenditure of appropriated money be regulated by the Mississippi Hospital Association.

The state should continue to care for the chronic sick such as the insane and tuberculous but should turn over the state owned general hospitals to the counties in which they are located for the care of the acute indigent sick of those counties, to be operated by a fund contributed to by state and county alike, the expenditure of which is to be regulated by a medical board and board of trustees appointed by the State Hospital Association through recommendations of the County Medical Society. The state thereafter should consider these hospitals the same as private community hospitals selected to serve the other counties and contribute to all alike on a wealth per capita basis of each county. Thus the state appropriation to care for the acute indigent sick will be evenly distributed over the whole state. Each county will appropriate a sum at least equal to that of the state. The funds so appropriated should be adequate for periods of depression and carefully guarded during periods of prosperity so that a surplus may accumulate to meet the emergency of dire distress such as the present.

So much for the formula. The ingredients are obtainable if only the medical profession will become sufficiently aroused. No one has greater influence with the people than the family physician has with his many patients. This influence should be used to educate the people to their needs and assist them in placing their needs before their legislators. Why should we hesitate to present the truth to those who will probably welcome it? Too long have we held aloof, with false dignity, from using our political influence in economic problems that threaten our profession. Is it undignified to fight for the righteousness of a profession as great as ours, when it means so much to the civilized world?

A. M. McCarthy.

Electric Mills, January 9, 1933.

MEDICAL WRITING
(Continued)

From "THE ART AND PRACTICE OF MEDICAL WRITING," Simmons and Fishbein. By permission.

STYLE

"James Huneker said: 'Style cannot be taught. A good style is direct, plain and simple. The writer's keyboard is that humble camel, the dictionary.' Sir Quiller-Couch put it in another way: 'Style in writing is much the same thing as good manners in other human intercourse.' It would be folly, therefore, to attempt here to teach medical writers that which cannot be taught.

"FINE, OR FANCY, WRITING

"Whenever one feels an impulse to perpetrate a piece of exceptionally fine literature, one should obey it whole-heartedly, but should delete what he has written before sending the manuscript to press. 'Fine writing' is not especially a fault of medical literature, yet it occurs with amazing frequency. Following are example from manuscripts submitted for publication:

"The pragmatic verity of this physiological concept of disease is established by its usefulness: with functional integrity our goal, the no-thoroughfare of unattainable structural integrity leaves us no longer at a therapeutic non-plus.

"Quite remarkable, but it doesn't mean anything.

"But what of the child? Who has championed it rights? Summoned against its will or without its consent into this world of trouble, pain, sickness and finally death, what Rousseau or Voltaire shall sound the tocsin, and call upon the infant muling and puking in the nurse's arms, to demand that its own mother shall give it that lactic fluid that is its primal right. Bid it howl like all the heads of Cerebrus agaist being condemned to partake of milk of cerulean hue contaminated by Bacillus bulgaricus prescribed by some adolescent and ardent disciple of Aesculapius. What Danton or Robespierre shall band together the sansculotte toddlers so that they may not be torn from the kindly face of mother earth, washed and dressed and sent to kindergarten where all of their play is so scientifically arranged by followers of Pestalozzi and Froebel that good fairies are unknown to them, and a 'primrose beside a mossy bank, is to them but a primrose, nothing more.' Where they are taught, like the clown in Lady Browning's poem, 'to pick simples, turning a broad back to the glory of the stars.'

"The author meant it seriously: It was part of a presidential address before a serious gathering.

"The specificity and mathematical exactness of its effects in given dosages of which Ehrlich dreamed has gone glimmering among the pitfalls of spirochetal individuality and variation in human susceptibility.

"Here the error is not so obvious; it lies in the use of words which sound extraordinarily well but which do not apply and therefore are confusing. Note 'glimmering' and pitfalls'."

(To be continued)

MORE ACCURATE REPORTS

While attending the meeting of the Southern Branch of the American Public Health Association held in Birmingham, Alabama, just prior to the meeting of the Southern Medical Association,

we were very much interested in a discussion of some of the problems peculiar to the southern states, etc. During one of these dscussions a pamphlet was circulated which was a tabulation of the number of deaths from pellagra occurring in forty-five states, and covering a period of time from 1915-1929, inclusive.

In looking over this sheet we found that the deaths from pellagra occurring in Mississippi from 1919-1929, inclusive, showed a total of 6,377. We were more profoundly impressed when we saw that this was the highest death rate for this disease of any other state over a like period of time carried in this tabulation. We noted next to Mississippi was South Carolina, over the same period of time, 1919-1929, inclusive, had 5,881 deaths. North Carolina over the same period was accredited with 5,315 deaths. Tennessee, over a like period, was accrediated with 2,660 deaths. We assume that these figures were taken from the mortality statistics issued by the U. S. Department of Commerce, Bureau of Census, and were as accurate as statistics go, and were entirely accurate when considered from a numerical standpoint only, as said information was based on death certificates signed by licensed, practicing doctors.

We regret this pamphlet did not carry Alabama's total over a like period of time, but for the five years carried for Alabama the total was 2,738, while for the same period in Mississippi, Mississippi's total was 3,348. The statistics from Arkansas showed only a mortality for three years, 1927-1929, inclusive, and their total was 1,803, as compared with Mississippi's total for the same length of time which was 2,215. The total for Louisiana for the eleven years as stated above was 2,660 as compared with Mississippi's 6,377.

We would not presume to question the diagnosis made by the members of our medical profession who have signed these death certificates, but we are at a loss to explain to our own satisfaction just why some of our surrounding states with practically as large colored population, or indigent white population, as we have do not show approximately the same number of deaths, and we have been thinking if it would be amiss or unethical for one who is continually studying mortality reports and causes assigned for death, to respectfully suggest that in view of the fact of the unfavorable publicity such high death rates give us, and in view of the fact of the economic stress we are now experiencing, and will perhaps experience for a number of years, that may be conducive of greater prevalence of pellagra, in view of the fact that although the problem of the cause of pellagra may not have been fully agreed upon, yet its relation to a limited diet can hardly be denied and that the disease may be prevented and in most cases cured by a diet well balanced and carrying the P P vitamins. I repeat, may we not respectfully suggest that greater care and consideration be given by us in making out death certificates and perhaps assigning as the cause of death, pellagra, based on some skin eruption and otherwise obscure symptoms when perhaps in our own mind we question the correctness of our own diagnosis when we assign pellagra as the cause of death.

F. Michael Smith.

Vicksburg, December 21, 1932.

PELLAGRA DECREASING

Apropros of the communication from Dr. F. Michael Smith in this month's Mississippi News, the following from "Science," of December 16, 1932, should be of interest:

"Deaths from pellagra, 'hard times' disease, have unexpectedly decreased during the present depression. Vegetable gardens and yeast seem to have effectually routed the former specter of economic depressions.

"These two factors, together with education in pellagra-preventive measures, seem to have reduced the pellagra death rate by about one third in face of the country's worst depression, according to a discussion of the subject by Dr. William DeKleine, of the American Red Cross, at a meeting of the Florida Public Health Association."

It would seem that Dr. Smith's suggestion that greater care and consideration be given in making out death certificates is an especially timely thought. It is not good for us as physicians or for our state to lead the country in incidence of pellagra. Let's report pellagra when it exists by all means but let's be sure of our diagnosis before we make such reports.

REGISTRY OF TECHNICIANS

In order to maintain a high level of efficiency and ensure adequate scientific training of technicians in hospitals and private laboratories, The America Society of Clinical Pathologists instituted in 1928, a Registry for passing on the competency of workers in this field.

The American Medical Association and the American College of Surgeons have endorsed the work and aims of the Registry by encouraging hospital administrators to have their clinical laboratory technicians certified by the Registry. It has also received the active cooperation of the hospital, laboratory directors, many of whom are members of the American Society of Clinical Pathologists, in giving information on the qualifications of applicants.

After April 1, 1933, their recommendations will be supplemented by a written examination which will necessarily increase the present fee of Five Dollars to Ten Dollars.

Over thirteen hundred names of qualified laboratory technicians are now on these lists. As the improvement in the quality of laboratory personnel is a forward step in the movement for hospital standardization all clinical laboratory technicians with the proper qualifications are urged by the Registry to seek recognition of their ability by a certificate.

The Board of Registry consists of Philip Hillkowitz, M. D., Chairman, Denver, Colorado; Kano Ikeda, M. D., St. Paul, Minn.; Roy W. Hammack, M. D., Los Angeles, California; Walter E. King, M D., Detroit, Michigan; M. W. Lyon, M. D., South Bend, Indiana; Asher Yaguda, M. D., Newark, N. J. Mrs. Anna R. Scott is Registrar with office at 234 Metropolitan Building, Denver, Colo.

NEWTON INFIRMARY

Dr. M. L. Flynt, who has been in charge of the Newton Infirmary for the past five years has closed his office in the Infirmary to open an office in the Meridian Medical and Surgical Clinic.

Drs. O. Simmons and D. N. Stennis will continue to have their offices at the Infirmary and will carry on the medical and surgical services with Dr. Flynt as visiting surgeon. Mrs. Simmons, a graduate of the Baptist Memorial Hospital, Memphis, a member of the nursing staff of the Campbell Clinic for two years and assistant night supervisor at the Memphis General Hospital for three years, will be superintendent of nurses and general supervisor of the operating room. Dr. and Mrs. Simmons will have their living quarters in the Infirmary. Mrs. H. McMullan will serve as chief dietitian. Mrs. Scottie Kemp will continue as bookkeeper and laboratory technician.

Mrs. K. M. Strain, former superintendent of nurses of Newton Infirmary, has accepted a position in Dr. F. G. Riley's Hospital, Meridian.
Newton, January 6, 1933.

MERIDIAN MEDICAL AND SURGICAL CLINIC

Six Meridian physicians and surgeons have organized the Meridian Medical and Surgical Clinic, which will work in conjunction with Dr. F. G. Riley's Hospital. These are Drs. M. L. Flynt, C. J. Lewis, C. R Stingily, T. D. Bordeaux, G. L. Arrington, and F. G. Riley. Dr. Riley has announced that his hospital is now a general hospital for the care of all surgical and medical patients.

The entire second floor of the Knights of Pythias building, located at the corner of Ninth Street and Twenty-second Avenue, has been leased and work of remodeling for the offices of the clinic will begin at once. Occupancy is expected on or about January 1. The building will be renovated and reconstructed with all the accommodations of a modern clinic.

Dr. M. L. Flynt, for the past five years surgeon and owner of the Newton Infirmary, Newton, and Dr. C. J. Lewis of Meridian, will be the surgeons and obstetricians for the group and for Dr. Riley's hospital; Dr. T. D. Bordeaux will be chief of the department of internal medicine and diagnosis; Dr. F. G. Riley and Dr. G. L. Arrington will be the pediatricians; and Dr. C. R. Stingily will be in charge of the x-ray, pathological and clinical laboratory departments.

MISSISSIPPI STATE BOARD OF HEALTH

The recent annual conference of health officers, sanitary engineers, and sanitary inspectors, which was held in Jackson, was the most successful ever had. There were one hundred and twenty-three in attendance and the program was excellent. The out-of-state speakers were: Dr. W. A. Evans, Professor of Public Health, Northwestern University, and Health Editor of the Chicago Tribune; Dr. L. M. Graves, Health Commissioner of Memphis, Tennessee; Dr. G. A. Wheeler of the U. S. Public Health Service; and Dr. Allen W. Freeman, Professor of Public Health Administration, Johns Hopkins University, Baltimore. Dr. Freeman gave a two-hour talk each morning of the conference.

The Copiah County Health Department will be continued on full-time basis. Because of lack of appropriation, it was thought that it would be necessary for the department to close; however, additional funds have been secured.

The following Mississippi physicians were awarded fellowships in December by the Commonwealth Fund of New York City: Dr. D. T. Brock, McComb; Dr. J. E. Hewitt, Summit; Dr. A. J. Fortinberry, McComb; Dr. S. Paul Klotz, McComb; Dr. H. F. Tatum, Meridian; Dr. W. N. Jenkins, Port Gibson; Dr. L. L. McDougal, Booneville; Dr. G. C. Terrell, Prentiss; Dr. J. B. Thigpen, Bay Springs; Dr. J. E. Ellis, West Point.

HOOKWORM SURVEY IN MISSISSIPPI

From 1909 to 1914, hookworm surveys were made in the various counties of Mississippi. This work was done by the Mississippi State Board of Health with the Rockefeller Sanitary Commission cooperating. The results of these surveys showed a rather high infestation rate in many of the counties. As a result of the findings, much sanitation was done and many thousand people treated for hookworm infestation. Although surveys have been made since this time in specific counties where full-time health workers are employed, no surveys have been made with the idea of showing the conditions which might apply to the state as a whole or to any major section.

The State Board of Health has been interested in such a survey for some years. Beginning September 1, 1932, such a survey was started with the Department of Preventive Medicine of Van-

derbilt University and the International Health Division of the Rockefeller Foundation cooperating. The program for this study of hookworm and other helminths in Mississippi includes an analysis of existing data and an examination of specimens of feces from all areas in the state. The studies to be made are:

1. The relation between soil and hookworm and other helminths after the examination of the fecal specimens is completed.

2. The incidence and intensity of infestation of these helminths at the present time together with the geographic, age, and sex distribution. By studying these factors it would be possible to outline accurately not only the sections in the state in which hookworm is present but also point out the severity of the probelm in the various age groups of the population.

3. A study of hookworm infestation in the negro race is also being made, including comparable population groups of whites and negroes of the same age to determine the intensity of infestation together with the physical condition of those two groups and the environmental conditions under which each group lives.

4. An investigation of the methods of excreta disposal in each county will be made.

To date, the examinations of eight counties have been completed. Twenty per cent of the 8,363 specimens examined showed the presence of hookworm ova. Of those found positive, there was an average worm burden of 135 worms per person.

The results of the survey indicate that intestinal parasites are a problem of the white race only. The colored race showed less than two per cent positive for hookworm ova.

It is hoped that the results of this survey when it is completed will stimulate interest in the prevention of hookworm disease which is a significant public health problem in the white race of the state.

Felix J. Underwood, Executive Officer.
Jackson, January 10, 1933.

MISSISSIPPI HOSPITAL ASSOCIATION

The American Hospital Association is endeavoring to secure aid for hospitals from the Reconstruction Finance Corporation and the Mississippi State Hospital Association has been asked to cooperate. Dr. Bert W. Caldwell, Executive Secretary of the American Hospital Association, states:

"All hospitals are particularly interested in securing such aid as the Reconstruction Finance Corporation can extend and in increasing the powers of this corporation so that our hospitals may receive the financial assistance to carry them over until better times come again. We are all interested, too, in the removal of any restrictions which the R. F. C. may have, or may at any time impose upon those welfare agencies—State, City, and County, governments receiving loans for relief—as the use of these loans so obtained may affect the payment of the hospital care given indigent patients.

" 'We believe that loans made by the R. F. C. to public welfare agencies and to political subdivisions for relief should include the payment for the care of indigent patients which our voluntary hospitals may furnish."

"On December 8, Senator Henrik Shipstead of Minnesota introduced into the Senate the following bill authorizing the Reconstruction Finance Corporation to make loans direct to hospitals within the same limitations as those made to commercial organizations.

" 'Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Reconstruction Finance Corporation is authorized and empowered to make loans under the Reconstruction Finance Corporation Act, as amended, to any public or private hospital organized under the laws of any State and upon the same terms and conditions, and subject to the same limitations, as are applicable in the case of loans to financial institutions specified in section 5 of such Act, as amended'."

"This bill was referred to the Committee on Banking and Currency on December 20. The members of this committee are as follows: Peter Norbeck, Chairman, South Dakota; Smith W. Brookhart, Iowa; P. Lee Goldsborough, Maryland; John G. Townsend, Jr., Delaware; Frederick G. Walcott, Connecticut; John J. Blaine, Wisconsin; Robert D. Carey, Wyoming, James E. Watson, Indiana; James Couzens, Michigan; Frederick Steiwer, Oregon; Duncan W. Fletcher, Florida; Carter Glass, Virginia; Robert Wagner, New York; Alben W. Barkley, Kentucky; Cameron Morrison, North Carolina; Thomas P. Gore, Oklahoma; Edward P. Costigan, Colorado; Cordell Hull, Tennessee; Robert J. Bulkley, Ohio."

Following is a letter written by Dr. Caldwell to the Honorable Atlee Pomerene, Chairman, Reconstruction Finance Corporation, on December 2:

"My dear Senator:

"The American Hospital Association desires to present for your consideration and for the consideration of the Reconstruction Finance Corporation the desirability of extending such assistance to the voluntary hospitals of the United States—those hospitals which are organized by philanthropic organizations and are supported by philanthropy and receive no support from taxation sources—as the powers of the Corporation may permit. In the event that under its present powers the Corporation is not permitted to render assistance to

the voluntary hospitals of this country it prays that the Corporation establish the necessary authority to afford in worthy instances the necessary relief to our voluntary institutions.

"The American Hospital Association represents in its membership 1,556 voluntary hospitals located in every city of the United States. They have been built, and maintained as public welfare agencies through the philanthropic support of generous citizens and of various religious denominations—Protestant, Catholic, and Jewish. Primarily organized to provide hospital care for all classes of our citizenry and devoting, particularly within the last two years, thirty-three and one-third per cent of their disbursements to the care of non-paying patients, these hospitals have admitted and cared for 5,500,000 out of the 7,156,000 patients admitted to all hospitals in this country during the last year.

"They find themselves called upon to take care of an increasingly large number of indigent patients and other patients who in better times would be able to contribute a part of the cost of their hospitalization and who are now unable to contribute anything. So serious is the situation that in 1931, 110 voluntary hospitals closed their doors for lack of funds to continue operation, and from January 1st to December 1st of the present year 162 of these hospitals have been forced to close.

"There is no public activity that is more necessary to the welfare of our people in these particularly severe times than the voluntary hospitals. Our public, tax-supported institutions are without exception crowded far beyond the limits of their bed capacities and are unable to care for all of the indigent sick who apply for admission. The voluntary hospitals have for the past two years exhausted their resources in taking over greatly increased burdens of the care of non-paying patients.

"In addition to the care of the patients admitted to the wards of our voluntary hospitals, these hospitals during 1932 have given medical attention to more than 22,000,000 patients in their dispensaries and out-patient departments, a vast majority of whom were cared for without any charge whatever, and the remainder at only a nominal charge averaging less than 25 cents per visit. So great is the contribution to the care of our indigent sick which our voluntary hospitals are making.

"They have not received in any form any assistance from national or governmental relief organization, and in the instance of practically every one of these voluntary hospitals the disbursements for the care of patients has greatly exceeded the income from all sources, leaving large deficits which have to be supplied through the generous donations of philanthropic citizens. If there are any public welfare agencies that are entitled to favorable consideration for relief by the Reconstruction Finance Corporation or any other governmental relief organization, the voluntary hospitals—those hospitals supported by religious denominations and by our philanthropic citizenry—are entitled to that consideration.

"We are advised that the Reconstruction Finance Corporation has in one or more instances in providing relief funds for communities emphasized the condition that such funds be used for outdoor relief only and that none of the funds provided by the Corporation could be devoted to the care of indigent patients admitted to hospitals. Of all people, who by reason of his physical incapacity to earn a livelihood even if an opportunity to do so were afforded him, the patient who has to enter a hospital to be returned to health and made physically able to contribute to his own and to his family's support is entitled to assistance.

"The voluntary hospital system of this country—because of greatly reduced philanthropic support—because of the inability of the patients admitted to the institution to pay for their care—and because of increased burdens for the care of indigent patients that have been imposed upon our hospitals through the stress of present circumstances, is on the verge of a complete breakdown.

"The American Hospital Association, Senator, respectfully invites your attention and the attention of the Reconstruction Finance Corporation to the necessities of our voluntary hospitals and petitions the Corporation to

"First, take such action as will enable the Corporation to assist those deserving institutions among the voluntary hospitals which are urgently in need of financial aid, and

"Second, to establish the rule of your Corporation that any funds granted to communities or other authorities for relief may be used for the payment for the hospitalization of indigent patients in the same manner and form as for all forms of outdoor relief."

It is urged that State and Regional Hospital Associations as well as National Organizations bestir themselves in the matter at once.

CENTRAL MEDICAL SOCIETY

The annual meeting of the Central Medical Society was held at the Edwards Hotel, Jackson, on Tuesday, December 23, at 6 P. M.

Scientific Program:

Dr. Walter E. Sistrunk, Jr., of Dallas, Texas, discoursed at length on "The Management of Streptococcus Infections of the Female Genital Tract." His paper was discussed by Drs. Barks-

dale, Hays, Van Alstine, Hooper, Rembert and Sistrunk (closing).

An excellent paper was read by Dr. B. S. Guyton of Oxford on "The Discharging Ear." Discussion was by Drs. Adkins, Harris, V. D. Hagaman, Hughes and Guyton (closing).

Fifty-seven members and guests were present. A resolution was offered by Dr. Willis Walley that the president be elected from various counties to alternate; seconded by Dr. D. W. Jones. Dr. Wall moved that the motion be tabled and the motion was carried. Therefore, Dr. Walley's motion was lost. Dr. Miller C. Henry's name was presented for membership and referred to the Board of Censors. Dr. Edmonson of Edwards and Dr. Harvey F. Garrison, Jr., were elected to membership.

SECRETARY'S ANNUAL REPORT

Receipts: 127 paid up members, $762. Received from exhibitors at State Medical Meeting, $100. Total, $862.

Disbursements: Paid for entertainment of Ladies Auxiliary during State Medical Association, $43.70, the secretary of the State Society, $508, two dinners at the Robert E. Lee Hotel, $66.26, stationery and stamps $74.92.

Miscellaneous: Flowers, entertainers, secretarial work, etc., $45.50. Federal tax on checks, 24c.

Total: $738.52. This leaves in the bank for 1932, $123.48.

We have in the bank a little more than this since a few members have paid their 1933 dues. Although the Medical Society has been poor this year, since he dues were reduced from $4 to $2, we have had including tonight three excellent meals and other entertainment and there will be left more in the bank at the end of this year than was left at the end of 1931.

The secretary recommends the election of a secretary and a treasurer to exist as separate officers; The purchasing of a mimeograph machine in order that programs may be sent to doctors in the vicinity of Jackson in addition to the membership with a minimum of secretarial aid; the adoption of a constitution and by-laws; securing of a new charter; the existence as a separate and self supporting organization of the Ladies Auxiliary; the nomination of at least two names for each office at the annual election (including secretary and treasurer) and let the chips fall where they may; that the election of the president alternate among the various counties that form the society.

The Society then proceeded to election of officers as follows:

President—Dr. John B. Howell.

Vice-President—Hinds, Dr. F. E. Rehfeldt; Madison, Dr. R. W. Smith; Rankin, Dr. W. H. Watson; Scott, Dr. W. C. Anderson; Simpson, Dr. J. L. Weimers; Yazoo, Dr. Gilruth Darrington.

Secretary.—Dr. Robin Harris.

Delegates to Mississippi State Medical Association—Hinds, Delegates, Dr. N. C. Womack and Dr. H. F. Garrison, Sr., Alternates, Dr. J. S. McIntosh and Dr. L. W. Long; Madison, Delegates, Dr. A. P. Durfey, Alternate, Dr. I. Edwards; Rankin, Delegate, Dr. J. B. Ainsworth, Alternate, Dr. R. N. Whitfield; Simpson, Delegate, Dr. Ros. Walker, Alternate Dr. W. W. Diamond; Scott, Delegate, Dr. R. B. Austin, Alternate Dr. A. A. Austin; Yazoo, Delegate, Dr. J. B. Anderson, Alternate, Dr. O. H. Swayze.

Program Committee—Dr. W. E. Noblin; Dr. Harvey Garrison, Sr.; Dr. G. W. F. Rembert; Dr. R. W. Hall; Dr. Robin Harris.

Robin Harris, Secretary.

Jackson,
January 7, 1933.

DE SOTO COUNTY MEDICAL SOCIETY

At a recent interesting meeting of the De Soto County Medical Society, the following officers were elected to serve for 1933:

President—A. J. Weissinger.

Vice-President—J. M. Wright.

Secretary-Treasurer—L. L. Minor (re-elected).

Delegate to Mississippi State Medical Association—A. L. Emerson; Alternate, A. J. Weissinger.

The president named L. L. Minor as County Editor for the New Orleans Medical and Surgical Journal.

L. L. Minor, Secretary.

Memphis, Route 4,
January 9, 1933.

EAST MISSISSIPPI MEDICAL SOCIETY

The annual meeting of the East Mississippi Medical Society was held on the mezzanine floor of the Lamar Hotel, Meridian on Thursday afternoon, December 15, with Dr. J. S. Hickman, president, presiding.

The following scientific program was rendered:

1. Treatment of Burns.—Dr. R. G. Hand, Quitman.

Discussed by Drs. M. J. Lowry, W. J. Anderson, H. S. Gully, and Dudley Stennis.

2. Should the Insane Asylum be Relieved of the Congestion: Dr. A. L. Monroe of the Mississippi State Hospital, Jackson.

Discussed by Drs. W. J. Cavanaugh, O. A. Schmid, M. J. L. Hoye, G. L. Arrington, W. H. Banks, H. S. Gully, D. V. Galloway, D. W. Walker, and J. S. Hickman.

3. Multiple and Solitary Cysts of the Kidney —Report of Two Cases—Dr. W. J. Anderson, Meridian.

Discussed by Drs. J. T. Bailey and W. R. Holladay.

Dr. Henry G. Rudner, Memphis, Tenn., who was to appear on the program was unable to attend on account of acute illness in his family. The secretary was instructed by a unanimous vote to

send our sympathy and regrets with wishes for a speedy recovery to Dr. Rudner, and extend an invitation to him to appear on our next program.

Three new members were elected to membership in the society as follows: Dr. O. A. Schmid of the Mississippi State Hospital, Meridian; Dr. D. V. Galloway of the Lauderdale County Health Department, Meridian; and Dr. W. C. Norris, Quitman.

The secretary was instructed by a unanimous vote to write to the Commonwealth of New York, expressing thanks for support and cooperation in securing an instructive medical program in 1932 and asking continued cooperation and support for the year of 1933.

Dr. T. G. Cleveland, vice-president for Lauderdale Country, appointed the following committee to arrange for this program: Drs. D. V. Galloway, Chairman, T. D. Bourdeaux, H. L. Arnold, W. J. Anderson.

The following officers were elected for 1933:

President—Dr. Dudley Stennis, Newton.

Vice-Presidents—For Lauderdale, Dr. T. G. Cleveland; for Newton, Dr. W. J. Pennington; for Neshoba, Dr. W. R. Hand; for Winston, Dr. E. L. Richardson.

Secretary—Dr. T. L. Bennett, Meridian.

Delegates—For Lauderdale, Dr. M. J. L. Hoye, Alternate, Dr. G. L. Arrington; for Newton, Dr. Dudley Stennis, Alternate, Dr. T. E. Jarvis; for Neshoba, Dr. W. H. Banks, Alternate, Dr. A. L. Majure; for Winston, Dr. E. L. Richardson, Alternate, Dr. W. B. Hickman.

Censors—For Lauderdale, Dr. H. F. Tatum; for Newton, Dr. S. A. Majure; for Neshoba, Dr. W. J. Stribling; for Winston, Dr. T. F. Kilpatrick.

Medico-Legal Adviser—Dr. I. W. Cooper, Meridian.

The next meeting will be held in Meridian, at the Lamar Hotel, February 16.

T. L. Bennett, Secretary.

Meridian,
January 9, 1933.

HARRISON-STONE-HANCOCK COUNTIES MEDICAL SOCIETY

Just a Yuletide greeting from your President and Secretary and with it goes a genuine appreciation of your loyalty and good fellowship which meant so much to us.

Our Society is good. Our enrollment in membership is above the average, but we should have more new members. Our programs are splendid; let us make them more interesting. Our new officers are fine men; let us help them to make 1933 a most successful year.

C. M. Shipp, President;
E. A. Trudeau, Secretary.

JANUARY MEETING

Will be held at the King's Daughters' Hospital, Gulfport, January 4, 1933, at 7:30 P. M.

Subject—To to announced.

Dues for 1933 are now due.

Biloxi,
December 29, 1932.

ISSAQUENA-SHARKEY-WARREN COUNTIES MEDICAL SOCIETY

The monthly meeting of the Issaquena-Sharkey-Warren Counties Medical Society was held on Tuesday, January 10, 7 P. M., at the Hotel Vicksburg. After a table luncheon, Drs. S. W. and W. E. Johnston presented moving pictures as follows:

1. Hernioplasty for Strangulated Ventral Hernia.
2. Posterior Colporrhaphy.

The remainder of the meeting was devoted to a discussion of the business affairs of the profession and was opened by Dr. E. F. Howard, who presented a careful study of the Report of the Committee on the Costs of Medical Care. Numerous matters of interest to the profession in a business way were generally discussed.

Report of the Secretary for the year of 1932 showed membership as follows:

Issaquena County, 3; Sharkey Country, 6; Warren County, 32; Life members, 1; Honorary members, 4.—Total 46, a gain of 2 over 1931. There were 11 regular meetings and one special meeting. The average attendance at meetings was 22 members and four visitors. Thirty members presented papers during the year, an average of 66.6 per cent. Five visitors presented papers.

There are within the jurisdiction of the Society licensed physicians, non-members as follows: Issaquena, None; Sharkey, 7; Warren, 8.

The Treasurer's report showed that the financial affairs of the Society are in good condition.

Resolutions of respect on the death of Dr. John E. Quidor were adopted.

The next meeting of the Society will be held at the Hotel Vicksburg on Tuesday, February 14, at 7 P. M.

ADAMS COUNTY

Miss Matty L. Rife and Dr. Henry Maxwell Smith, Natchez, were married December 27. Miss Rife was past president of the Adams County Nurses Association. Dr. Smith practices medicine in Natchez and is also interested in real estate and planting in Louisiana.

Mr. George Dicks, a student at the Medical School of Vanderbilt University, spent the Christmas vacation with his parents, Dr. and Mrs. J. W. D. Dicks.

The Chamberlain-Rice Hospital was the setting for a delightful entertainment December 23, when Mr. Ferriday Byrnes complimented the nurses with

a supper party, which was also attended by the medical staff.

L. Wallin, Editor.

Natchez,
January 10, 1933.

ALCORN COUNTY.....Missing
AMITE COUNTY.....Missing
ATTALA COUNTY .....Missing
BENTON COUNTY.....Missing

BOLIVAR COUNTY

Dr. L. B. Austin, Rosedale, was called to the bedside of his sister near Vicksburg, during December and we are glad to report her recovery from pneumonia.

Dr. S. W. Colquitt, Beulah, who was confined to his bed for several days with the flu, is out again.

Unfortunately your correspondent is unable to give any further news from Bolivar County as he has been unable to hear from any of the doctors in the neighboring towns. If any of these gentlemen will be kind enough to drop him a line stating any happenings of interest either to themselves or others he will be glad to incorporate the same in his report.

C. W. Patterson, Editor.

Rosedale,
January 9, 1933.

CALHOUN COUNTY .....Missing
CARROLL COUNTY .....Missing
CHICKASAW COUNTY .....Missing
CHOCTAW COUNTY .....Missing
CLAIBORNE COUNTY .....Missing
CLARKE COUNTY .....Missing

CLAY COUNTY

It has been several months now since reporting any news from Clay County, but there is always an alibi when neglecting one's duty. First, I wish to say we have had no news of interest to report or, at least, I have been unable to get news items from the doctors in this county other than a general complaint of continued hard times and no money to boost up the spirits.

The Northeast Mississippi Thirteen County Medical Society held its regular quarterly meeting in Aberdeen on December 20, with not more than twenty-five members in attendance, when there should have been around one hundred, but snow and ice with bad roads prevented the usual membership attending. We were given a very splendid banquet by the Aberdeen physicians and there were a few interesting papers read and discussed. The same officers for 1933 were elected with the exception of the president, Dr. F. L. McGahey of Calhoun City.

Dr. J. E. Ellis, West Point, left for New Orleans on January 2, where he will be for the next four months doing post-graduate work and we all wish for him a successful course.

Dr. and Mrs. C. W. Emerson, Hernando, spent part of the Christmas Holidays with the writer and family.

As to the community hospital project in every county, will say I do not favor this. I do not believe such a plan is feasible and I can not see how they could be financed, as practically all of the small hospitals now operating in the State are running at a loss.

Lon W. Dotson.

West Point,
January 9, 1933.

COAHOMA COUNTY .....Missing
COPIAH COUNTY .....Missing
COVINGTON COUNTY .....Missing

DESOTO COUNTY

Dr. and Mrs. William B. Kountz, St. Louis, Mo., visited Mrs. Kountz's parents, Dr. and Mrs. A. J. Weissinger, recently. Dr. Kountz was granted a leave of absence by the medical college of which he is an associate professor of medicine, for a year. Six months was spent in Europe and six months in Egypt in research work. Dr. and Mrs. Kountz gave many interesting accounts of their trip abroad.

Mrs. Edward Gale, Dr. Weissinger's other daughter, lives in Hernando. She is the mother of a thirteen-months-old baby which is the delight of the whole family.

The doctor's son, James Scott, is in business with his father in Hernando. Some time ago he married Miss Katherine Sanders of Walls.

The Mid-South Post-Graduate Medical Assembly's forty-ninth annual meeting will convene at Hotel Peabody, Memphis, Tennessee, February 14 to 17, 1933. A member of noted medical men will address this group. Membership in the assembly is open to doctors in all parts of the South. Many Mississippi doctors expect to attend this meeting.

L. L. Minor, County Editor.

Memphis, Tenn., Route 4,
January 9, 1933.

FOREST COUNTY

I can't say that we have had very much to report from Forest County this month. The following doctors have had the "flu": Dr. J. P. Culpepper, Jr., Dr. C. C. Hightower, Dr. S. E. Bethea, Dr. H. G. Cook and Dr. H. C. McLeod. I am glad to state that these doctors have completely recovered and are back on the job The flu situation seems to be improving, however, there

has been several deaths from pneumonia following flu.

We doctors in Hattiesburg believe that times are getting better as some of the doctors who have been smoking Prince Albert tobacco have been seen smoking cigars here of late. It might be that these are Christmas presents.

That is all the news I have for this time. No marriages among the doctors. No births and no deaths.

C. C. Buchanan, County Editor.

Hattiesburg,
January 11, 1933.

FRANKLIN COUNTY .....Missing
GEORGE COUNTY .....Missing
GREEN COUNTY .....Missing
GRENADA COUNTY .....Missing
HANCOCK COUNTY .....Missing
HARRISON COUNTY .....Missing

HINDS COUNTY

The Staff of the Jackson Infirmary met December 27, 6 P. M., at which time a delicious dinner was served. After the dinner the members assembled in the library where a good program was enjoyed by all.

The Staff of the Baptist Hospital met January 3, at which time the usual good meal was served and the program rendered was exceedingly interesting and instructive. These meetings are always attended by a large crowd.

The Central Medical Society held its meeting at the Edwards Hotel, December 20. We were greatly honored by having with us Dr. Sistrunk, of Dallas, and Dr. Guyton, of Oxford, both of whom read interesting and instructive papers.

Dr. Julius Crisler has just returned from California where he went to be with his wife, who is sick, and to bring her back to Jackson. We hope for Mrs. Crisler a speedy recovery.

Dr. and Mrs. Temple Ainsworth are at home in Jackson following their honeymoon. They were married December 4.

Dr. and Mrs. Brister Ware, who were married December 11, are at home in Jackson.

Dr. T. J. Crofford, who has been confined to bed at the Baptist Hospital for several months, expired December 15.

Wm. F. Hand, County Editor.

Jackson,
January 5, 1933.

HOLMES COUNTY

At a called meeting of the physicians of Holmes County, a regular staff for the Holmes County Community Hospital was organized on the second Tuesday in December, with Dr. R. M. Stephenson, Lexington, as chairman, and Dr. C. H. Ingram, Pickens, as secretary. The second Tuesday night in each month was selected as the regular meeting time, and the secretary has sent out the following letter to all the physicians in the county, relative to the January meeting:

"Pickens, Mississippi,
"Jan. 6, 1933.

"Dear Doctors:

"On the second Tuesday, Jan. 10, 1933, at 7:30 P. M., there will be a regular monthly meeting of the Holmes County Community Hospital Staff, at the hospital. By virtue of residence, you are a member. We shall expect and look for you.

"It is the desire of the president and all official members of the staff to make this and all subsequent meetings of the utmost interest to each and every one.

"Our prime purpose is to standardize our hospital and these monthly meetings constitute one of the requirements.

"It is purposed and intended to divert all spare time to a discussion of cases, both medical and surgical; also to make of the staff somewhat an official county medical society, wherein all may feel free to discuss anything of interest to the organization, and the fraternity.

"We shall be looking happily forward for your presence and any words of help and cheer which you may speak.

"Fraternally,
R. M. Stephenson, Pres.,
C. H. Ingram, Secy."

R. C. Elmore, County Editor.

Durant,
January 9, 1933.

HUMPHREYS COUNTY .....Missing
ISSAQUENA COUNTY .....Missing
ITTAWAMBA COUNTY .....Missing

JACKSON COUNTY

At the regular meeting of the staff of the Jackson County Hospital, held at the hospital, Thursday evening, January 12, the following officers for the ensuing year were elected: S. B. McIlwain, President; R. C. Eley, Vice-President; J. F. Busey, Secretary-Treasurer.

Several items pertaining to the year's work were discussed, mostly taxes.

After the meeting adjourned delicious coffee and pie were served by the nurses and the doctors wondered how the nurses had managed to stay single since they are such good cooks.

S. B. McIlwain, County Editor.

Pascagoula,
January 13, 1933.

JASPER COUNTY .....Missing
JEFFERSON COUNTY .....Missing
JEFFERSON DAVIS COUNTY.....Missing
JONES COUNTY .....Missing

KEMPER COUNTY

At the annual election of officers of Kemper County Medical Society held January 2, 1933, Dr. C. M. Gully was elected president; Dr. V. M. Creekmore, secretary. Dr. Creekmore was elected delegate to the State Medical Convention.

The friends of Dr. and Mrs. T. H. Wall, Scooba, regret to learn of the death of Mrs. Wall's mother, Mrs. Madison, of Scooba.

Dr. J. L. Hasie of Electric Mills, returning from a recent deer hunt, reports that he almost got his buck, and learned a heap about the Club's kangaroo court.

A. M. McCarthy, County Editor.

Electric Mills,
January 9, 1933.

LAFAYETTE COUNTY .....Missing
LAMAR COUNTY .....Missing

LAUDERDALE COUNTY

Mr. and Mrs. George Nuttall Dyson have announced the marriage of their cousin, Miss Jeanette Hamilton, to Drs. Hewitt Hasselle Robinson, on Sunday, the first of January, 1933, at Stanford Memorial Church, Stanford University California. Dr. and Mrs. Robinson will be at home after the fifteenth of January at 1508 Twenty-fourth Avenue, Meridian, Mississippi. Dr. Robinson is the elder son of Dr. E. E. Robinson, Meridian.

If it is pardonable for me to write about myself, I received the appointment under the new city administration for city physician.

Our little, ONLY daughter, Frances Milbrey Burt, will celebrate her eighth birthday anniversary, January 18.

The staff of Dr. Anderson's Hospital is to hold a meeting this week.

Having been so occupied taking over duties of city physician, I have failed to secure further data.

With best wishes for the new year.

Chas. T. Burt, County Editor.

Meridian,
January 10, 1933.

LAWRENCE COUNTY .....Missing
LEAKE COUNTY .....Missing
LEE COUNTY .....Missing

LEFLORE COUNTY

Dr. L. A. Barnett attended the annual Health Officers Conference in Jackson on December 12.

Dr. and Mrs. W. D. Wilson, Schlater, were called to Chicago on account of the serious illness of their son, Walter, who had pneumonia. He has recovered, and they were able to return for the Xmas holidays.

Dr. Tate Carl received his M. D. degree December 17 from the University of Tennessee School of Medicine. He will remain with his parents in Greenwood until February, when he returns to begin an internship at the Memphis General Hospital.

Dr. Fred Sandifer of the University of Chicago, and Gwin Meunger of Tulane spent the Xmas holidays with home folks.

Dr. J. P. Kennedy spent Christmas day with his father's family at Pinola.

Dr. G. Y. Gillespie, Jr., also spent Christmas with his father, Dr. G. Y. Gillespie, at Duck Hill.

Dr. Ruth Dean, Lewes, Delaware, spent the week of Christmas with her grandmother in Greenwood.

Dr. T. R. Montgomery, Memphis, Tenn., spent December 27 in Greenwood with his mother, Mrs. Julia Montgomery, and sister, Mrs. I. L. Jones.

Dr. Robert Dickins, Greenville, spent Monday, December 26, with his father, Dr. W. B. Dickins, and family.

Dr. Robert McLean, New York City, was in Greenwood January 2, greeting his friends of his boyhood. His father was the late Dr. J. L. McLean of Greenwood, and Memphis, Tenn.

Drs. A. M. Gill, Sidon, and T. M. Riddell, Swiftown, were recent visitors to Greenwood.

We are glad to report that Dr. W. G. Tabb has recovered from an attack of influenza.

W. B. Dickins, County Editor.

Greenwood,
January 5, 1933.

LINCOLN COUNTY .....Missing
LOWNDES COUNTY .....Missing
MADISON COUNTY .....Missing
MARION COUNTY .....Missing
MARSHALL COUNTY .....Missing

MONROE COUNTY

Well "thirty-two" is but a memory—to many of us it may have been little more than a nightmare. I wonder what "thirty-three" has in store? Personally, I dare not express my fears in words. One who has tried to direct a relief campaign, as have I, for several months and consequently KNOWS the tragic condition of the masses as I do, can not feel other than depressed. I simply can see no indication of better things in the near future. Besides this I KNOW that the masses are thinking ugly thoughts. I am convinced that only a leader with improper motives or wrong conceptions of the condition, is needed

to start something that can not be controlled. There is something fearfully wrong—the people know that much, but they can not understand. Oh, for leaders, local, state and national, with understanding, sympathy and patriotism. In this section of the state the doctors are on the ragged edge. They are not receiving enough pay to meet overhead expenses. They are living on the past or are living on the future and the standard of living has fallen to an unthinkable level. What, in heaven's name, can be done? It is time for US to THINK (I wonder if we can think?).

Our society held its final meeting for last year at Aberdeen on the twentieth ult. The earth was covered with sleet—had been for days. The crowd was very small—the smallest in our history. But the welcome extended by the doctors living there and the people was beautiful indeed. How I wish everybody knew and might enjoy the hospitality of old Monroe County. There are thirteen counties in our territory, but more than one-fourth of our meetings are held in Monroe. We would not have it otherwise. We expect in early summer to have the society and many of our friends beyond our borders with us at old Greenwood Springs. Greenwood Springs was once a very noted and fashionable resort in north Mississippi. We hope to give every one who comes a thrilling time. We elected Dr. F. L. McGahey of Calhoun City, to be our president for this year—1933. We feel that we have honored ourselves in thus honoring him and we expect great things under his leadership for the coming year.

But I feel that I would be derelict if I should not say a word of praise for our president immediately preceding him—Dr. W. C. Spencer of Tupelo. Dr. Spencer is one of our "grand old men"—one who, if "copied well might be a pattern for these younger years." Dr. Spencer's health has not been up to the standard for several months. Nevertheless he served us well and did honor to his office and us while occupying the chair as president of the largest and best society in the state. We are happy to have him with us as one of our most highly respected members.

I regret to have to chronicle the rather serious illness of Dr. T. D. Summerford's wife. She is in the hospital at Amory at this time. We hope for a speedy recovery and assure her and each member of her family that they have our interest and sympathy.

Wedding bells rang recently in our territory. Dr. Robert Christian, who was reared, largely, in Amory and who has lived at Baldwyn until a few months ago, celebrated Christmas in the finest way. I regret that for the present the name of his bride escapes may memory. I have known for some months that such a step was in the offing. Dr. Christian is now on the staff of one of the veterans' hospitals in one of the Carolinas. We wish for them all joy and prosperity.

In the words of Lowell Thomas, "So long" for the present.

G. S. Bryan, County Editor.

Amory,
January 5, 1933.

MONTGOMERY COUNTY ..... Missing

NESHOBA COUNTY

The doctors of this locality have been very busy for the past few weeks owing to the prevalence of the recent influenza epidemic. There seems to be an unusually large number of cases of pneumonia.

Dr. C. H. Harrison was confined in bed for several days on account of a case of flu. We are glad to report that at this writing he is up and seems to be having a satisfactory convalescence. Dr. W. J. Stribling and Dr. W. L. Watkins are also reported to be on the "ailing" list.

Dr. J. S. Hickman, formerly of Philadelphia, but now connected with the State Hospital in Jackson as a member of the staff spent a few of the Christmas holidays in Philadelphia. We miss him from among our ranks and are always glad to have him visit us.

Dr. W. R. Hand the writer, reports a case of tularemia, patient's condition satisfactory.

Dr. R. G. Hand and wife of Quitman, visited their parents in Philadelphia during the Christmas holidays. He reports a very satisfactory duck hunt in Louisiana. Although an amateur at duck hunting he had no difficulty in securing the bag limit each day he was out.

W. R. Hand, County Editor.

Philadelphia,
January 7, 1933.

NEWTON COUNTY ..... Missing
NOXUBEE COUNTY ..... Missing
OKTIBBEHA COUNTY ..... Missing
PANOLA COUNTY ..... Missing
PEARL RIVER COUNTY ..... Missing
PERRY COUNTY ..... Missing
PIKE COUNTY ..... Missing

PONTOTOC COUNTY

1933 was ushered in like a crisp spring morning. We are having quite an epidemic of flu in this section of the state. The most of it is of a mild type with very few fatalities and those are in real old people. Up to date we have had very little pneumonia.

The many friends of Dr. J. R. McDaniel of

Steele, Mo., will regret to hear of his wife's death on January 5. Dr. and Mrs. McDaniel were born and reared in Pontotoc County and moved to Missouri about eleven years ago.

Here's wishing everybody a prosperous and happy new year.

R. P. Donaldson, County Editor.

Pontotoc,
January 7, 1933.

PRENTISS COUNTY

At the regular staff meeting of the Northeast Mississippi Hospital, Monday night, December 5, the clinical program was conducted by Drs. W. V. Davis and R. B. Cunningham, the former reading a paper with case report on acute anterior poleomyelitis, and the latter a paper and case report on hypertrophic pyloric stenosis.

Dr. S. L. Pharr who has been convalescing from an appendicitis operation returned to his office today and is again seeing his patients.

Dr. L. L. McDougal, accompanied by Mrs. McDougal, left December 29 for New Orleans where Dr. McDougal is taking post-graduate work. He was awarded a fellowship under the Commonwealth Fund plan.

Drs. W. H. Sutherland, W. H. Anderson, L. L. McDougal and R. B. Cunningham were among the victims of the recent "flu" epidemic

R. B. Cunningham, County Editor.

Booneville,
January 7, 1933.

QUITMAN COUNTY ..... Missing
RANKIN COUNTY ..... Missing
SCOTT COUNTY ..... Missing

SHARKEY COUNTY

Dr. and Mrs. H. S. Goodman, Cary, report a delightful motor trip to their old home in Virginia, attending a family reunion.

Dr. and Mrs. E. B. Stribling, Rolling Fork, are the proud possessors of a fine grand-daughter. This is the first Stribling grandchild.

W. C. Pool, County Editor.

Cary,
January 11, 1933.

SIMPSON COUNTY

Our Christmas and New Year holidays are over and all of us have started out trying to make this new year, 1933, a better year. I don't mean we didn't have plenty of work in 1932, but I mean that we got less for it than any other year of my practice, going by percentage, and I have been a doctor for thirty-two years.

Our county has had almost an epidemic of influenza which luckily has not been very severe. There has also been a number of cases of pneumonia with only a few fatalities.

The Sanatorium doctors report that influenza has been very prevalent among the patients there, but no case has resulted seriously.

The hospital was crowded for a few days during the holidays with victims of accidents and otherwise.

Dr. R. E. Giles, Mendenhall, county health officer, thinks that he has finished the most complete vaccination, both typhoid and diphtheria, the county has ever had.

Dr. E. L. Walker attended a medical meeting held in Jackson in December.

E. L. Walker, County Editor.

Magee, January 9, 1933.

SMITH COUNTY ..... Missing
STONE COUNTY ..... Missing
SUNFLOWER COUNTY ..... Missing
TALLAHATCHIE COUNTY ..... Missing
TATE COUNTY ..... Missing
TIPPAH COUNTY ..... Missing
TISHOMINGO COUNTY ..... Missing
TUNICA COUNTY ..... Missing
UNION COUNTY ..... Missing
WALTHALL COUNTY ..... Missing
WARREN COUNTY ..... Missing

WASHINGTON COUNTY

A special called meeting of the Staff of the King's Daughters' Hospital at Greenville, was held January 4, and the following motion was unanimously passed—that Dr. A. G. Payne be appointed as a committee of one to go before the Apportioning Board of the Reconstruction Finance Corporation Relief Fund to present the interests of the physicians with reference to dispersion of said funds in Washington County, and that any action taken shall not be rendered as a precedent with regard to future relations and shall be regarded only as an emergency measure.

Dr. T. F. Wilson of Arcola, who has been a patient at the King's Daughters' Hospital since December 26, is steadily improving and will be able to go home in a few days.

Dr. T. J. Barkley of Isola brought his wife to the King's Daughters' Hospital, December 26. Mrs. Barkley has been critically ill, but is greatly improved and doing very nicely now.

Dr. H. A. Gamble had his tonsils removed several days ago. He is getting along nicely much to the delight of his many friends.

The Mid-South Post Graduate Medical Association meets in Memphis, February 14-17. These meetings have developed into real post-graduate courses and are well worth attending. It is earnestly urged that every doctor in Washington County attend.

J. G. Archer, County Editor.

Greenville, January 5, 1933.

WAYNE COUNTY.....Missing
WEBSTER COUNTY.....Missing
WILKINSON COUNTY.....Missing

WINSTON COUNTY

Dr. E. L. Richardson is just out from a spell of flu. We are glad he seems to be improving.

Dr. W. W. Hickman of south Mississippi, who has a saw mill practice, is in Louisville on business. Dr. W. B. Hickman, his son, is substituting for his father while he is here.

Dr. S. W. Pearson is in Memphis on business this week.

The writer had the honor to participate in an opossum dinner with Dr. W. W. Parks last week. Besides the usual hospitality of him and his fine family, we showed our appreciation by eating a very heavy meal.

We know but little news of interest to our vast number of doctor friends, as I presume hard collections and depression are about all we hear.

The Winston County Medical Fraternity will meet next Thursday, January 10, at 3 P. M. We hope to have all members present.

M. L. Montgomery, County Editor.
Louisville, January 5, 1933.

YALOBUSHA COUNTY.....Missing
YAZOO COUNTY.....Missing

DEATHS OF MISSISSIPPI PHYSICIANS—1932

Statistics furnished by Dr. Felix J. Underwood, Executive Officer of the Mississippi State Board of Health, show that thirty-nine Mississippi physicians died during the year of 1932 as compared with 52 in 1931 and .52 in 1930. The average age at time of death for the 38 whose ages were known was 64 or three years higher than last year. The distribution by decades for the past two years were as follows:

Age	1931	1932
30-40	1	0
40-50	7	3
50-60	15	11
60-70	11	12
70-80	13	8
80-86	4	4
Unknown	1	1
	52	39

It will be seen with encouragement that in spite of numerous statements to the contrary, all physicians, at least Mississippi physicians, do not die young.

As last year, diseases of the heart and blood vessels lead as causes of death, 14 or 36 per cent being attributed in whole or in part to such diseases. But even this high figure is considerably less than last year when the percentage of such deaths was 45 per cent. Four deaths were attributed directly to malignant disease and in one malignancy was a contributory cause, an incidence of 13 per cent, one per cent higher than last year. Pneumonia, tuberculosis and nephritis were each named twice. Four deaths were due to violence or accident. The list follows:

Name	Residence	Cause of Death	Date	Age
Armstrong, M. C.	Topisaw	Organic hearth trouble	June 25	50
Barnette, Ben J.	Indianola	Cirrhosis of liver	Apr. 20	60
Beacham, W. D.	Hattiesburg	Chronic heart condition	June 23	58
Booth, M. A. (Col.)	Greenwood	Suicide	Oct. 19	44
Brewer, W. C.	Columbus	Killed in pistol duel on street	Nov. 28	54
Bridges, R. R.	Crystal Springs	Carcinoma of the prostate gland	Feb. 26	77
Buie, N. H.	Fayette			66
Butler, D. P.	McCall Creek	Cerebral hemorrhage, hypertension. Result of injuries in automobile accident	Jan. 13	61
Carlisle, Devro	Meridian	Skull fracture—automobile accident	May 19	83
Carter, P. A.	Hattiesburg		Dec. 2	61
Clark, Sam	Brooksville		Dec. 17	74
Cook, Mrs. Malinda G.	Charleston	Old age—Pyelitis	Oct. 9	86
Cowart, Eleazor Joseph	Hendersonville (Lyman—Res.)	Carcinoma of Pancreas	Mar. 14	57
Crump, R. P.	Memphis, Tenn.			65
Dampeer, J. M.	Crystal Springs	Sepsis following pelvic abscess. Probably recurrence of cancer of lower bowel	July 14	64
Darden, S. J. T.	New Albany	Appendicitis and general peritonitis	Oct. 5	55
Doss, W. L.	Columbus	Chronic endocarditis	Jan. 22	61

Name	Residence	Cause of Death	Date	Age
Ford, Theodore B.	Columbia	Myocarditis; influenza	July 21	83
Heath, Thos. A.	Shiloh	Pneumonia—Double lobar	Jan. 17	75
Higdon, Robert E.	Brookhaven	Uremia—Chronic Nephritis	Jan. 24	59
Hogan, C. H.	Sartartia	Chronic nephritis; mitral regurgitation	Aug. 18	52
Holmes, C. B.	Silver City	Accidental drowning	July 21	68
Hutchinson, Clarence E.	Ocean Springs	Apoplexy—Contributory cause —Hypertension	Apr. 24	50
Lucas, E. C.	Ebenezer	Arteriosclerosis; Cerebral softening	Jan. 9	71
McInnis, J. M.	Brooklyn		Nov. 22	64
Marsalis, W. I.	Centreville	Acute dilatation heart; coronary thrombosis; chronic myocarditis; hypertension	May 28	59
Montgomery, J. W.	Columbia	Lobar pneumonia	Jan. 9	50
Murphy, Wm. Edwin	Pass Christian	Pulmonary tuberculosis. Contributory cause, tuberculous laryngitis	Aug. 6	40
Pace, R. D.	Meridian	Angina pectoris	Aug. 20	68
Rowland, Robert Walter	Sanatorium	Tuberculosis of lungs. Contributory cause—T. B. of the larynx	May 9	48
Smith, C. W.	Glendora	Aneurism; Arteriosclerosis	Feb. 22	51
Stone, Owen W.	Brooklyn, N. Y. (Army Hospital)		Feb. 29	81
Shamburger, James M.	Toomsuba	Sudden death. Probably heart attack—no physician present	Jan. 1	76
Turnipseed, J. A.	McCool	Cancer of sigmoid. Contributory cause, partial paralysis	July 10	65
Walton, John H.	Como	Cerebral hemorrhage	Nov. 20	79
Weeks, J. D.	Ackerman	Heart block. Sudden death. Arteriosclerosis	Nov. 24	75
Wilkinson, John D.	Gulfport	Hypertrophy of heart and aortitis; cholecystitis	May 21	69
Williams, J. H.	Laké Providence (Louisiana)		Oct.	
Wright, Edwin	Sardis	Carcinoma upper right lung and pleura	Sept. 27	70

DR. T. J. CROFFORD

RESOLUTIONS

WHEREAS, life, with its ever changing cycle, brings experience fraught with happiness and laden with sadness, and

WHEREAS, the passing of mortals from God's foot-stool is to be expected in the course of events, and though mindful of the certainty of such a translation, we are never prepared to surrender our loved ones at the behest of the Supreme Being, and

WHEREAS, life is dear to youth, with its unfilled hopes, precious to mid-life with its tempering responsibilities, and even cherished by old age, with its consciousness of days well spent; yet when life is cut off there irresistably comes the thought that life is denied its opportunity, and

WHEREAS, an estimate of one's character is very apt to be based by personal regard and a true evaluation is lost in the maze of circumstances, still to all, who knew him, comes the realization that there has left us a man, worth while, when our fellow practitioner and friend, Doctor Thomas J. Crofford fell asleep; and

WHEREAS, in this man's daily life there was exemplified those virtues that caused him to practice in and out of season every duty; made him an obedient son, a faithful husband, a solicitous father, an ethical practitioner of the healing art, an upright citizen, and a gentleman, and

WHEREAS, it is not to be forgotten that posthumous glory soon sinks into forgetfulness, yet the verities, for which Doctor Crofford's life was a shining example, will live long after he has

slipped into the tongueless silence of a dreamless sleep, and

Whereas, we are not unaware that expressions of condolence often fall far short of their intended meaning, and that words of sympathy are many times empty verbiage, yet those of us, who had the rare fortune to know and be associated with our departed confrere, do desire thus to express our estimate of this co-worker and friend: "For tho' from out Bourne of Time and Place
The floods may bear me far,
I hope to see my Pilot face to face,
When I have crossed the bar."

THEREFORE, Be it resolved by the Staff of the Mississippi Baptist Hospital, Jackson, Mississippi, in regular meeting, January 3rd, 1933, that the above resolutions be spread upon the minutes, and a copy be forwarded to the family of our departed friend.

J. P. Wall
W. G. Wilde
H. C. Sheffield.

Adopted by the staff of the Mississippi Baptist Hospital, January 3, 1933.

Lawrence W. Long, Secretary.

DR. JOHN E. QUIDOR

Dr. John E. Quidor, Vicksburg, aged 53 years, died January 5 of portal cirrhosis and esophageal hemorrhage.

Dr. Quidor had been connected with the Medical Department of the United States Corps of Engineers in the Vicksburg, Mississippi, river district since 1929. He is survived by his wife, Mrs. Edith Quidor, two sons, John H. and James S., both of Vicksburg, one daughter, Mrs. Nina Sicard of New Orleans, and his mother, Mrs. Nancy N. Stricklin of Little Rock, Arkansas. Interment was at the old home in Jacksonville, Arkansas.

Dr. Quidor received his degree in medicine from the University of Arkansas in 1905. He was licensed to practice medicine in Mississippi in 1930. He was a member of the Issaquena-Sharkey-Warren Counties Medical Society, the Mississippi State Medical Association, and a fellow of the American Medical Association.

RESOLUTIONS

WHEERAS; God in His infinite wisdom has seen fit to take from amongst us our brother physician, Dr. John E. Quidor, and

WHEREAS; he was a loyal member of the Issaquena-Sharkey-Warren Counties Medical Society, a physician of ability, a gentleman of character beloved by his friends and admired and respected by all who knew him.

THEREFORE, be it resolved that the Issaquena-Sharkey-Warren Counties Medical Society does deeply regret his untimely passing and does hereby extend to his wife and family its deep and sincere sympathy, and

FURTHER, be it resolved that a copy of this resolution shall be included in the minutes of the Society and copies forwarded to his family and to the press.

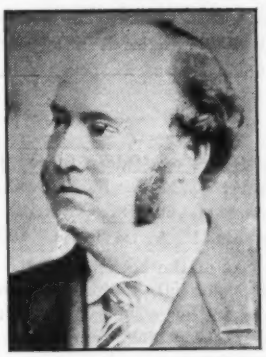
Respectfully submitted,

Edley H. Jones, Chairman
L. J. Clark, Committee.

Resolutions approved by the Issaquena-Sharkey-Warren Counties Medical Society January 10, 1933.

Attest: Leon S. Lippincott, Secretary.

LEST WE FORGET THEIR GOOD WORKS



WILLIAM M. COMPTON
Holy Springs, Mississippi
President, Mississippi State Medical Association, 1871-2.

Wm. M. Compton was born at Madisonville, Ky., August 4th, 1833, and died at his home near Holly Springs, Miss., of yellow fever, October 3rd, 1878. Graduating from Jefferson Medical College of Philadelphia, he settled in Marshall County, Miss., dividing his time between the practice of medicine of the care of his plantation, and in 1861 was commissioned staff-surgeon of the brigade of 60-day state troops under General James L. Alcorn. In 1862 he was commissioned surgeon C. S. A. and assigned to duty with the Second Texas Infantry. During his service with this command it was his fortune to perform one of the few successful hip-joint amputations recorded in the annals of the war.

Dr. Compton served during the siege of Vicksburg and was later appointed to the board of examining surgeons. At the close of the war he returned to his home in Marshall County and was elected to the constitutional conventions of 1865 and 1868. In 1870 he was appointed superinten-

dent of the State Insane Asylum, serving in this capacity for two terms, after which he returned to Marshall County, where he began the erection of a private asylum, intending to devote the remainder of his life to this specialty, but before its completion came the epidemic of yellow fever, in the fight with which, although not previously engaged in general practice, he laid down his life.

Before his election to the presidency, Dr. Compton served the Association in 1869-70.

Transactions 1879.

NOTE—If anyone knows of any additions or corrections that should be made to the above sketch, please communicate with Dr. E. F. Howard, Historian, Vicksburg.

HONOR ROLL

The following have co-operated in making this number of our Mississippi part of the JOURNAL:

COUNTY EDITORS—L. Wallin, C. W. Patterson, L. W. Dotson, L. L. Minor, C. C. Buchanan, W. F. Hand, R. C. Elmore, B. S. McIlwain, A. M. McCarthy, C. T. Burt, W. B. Dickins, G. S. Bryan, W. R. Hand, R. P. Donaldson, R. B. Cunningham, W. C. Pool, E. L. Walker, F. M. Acree, M. L. Montgomery.—19.

COUNTY MEDICAL SOCIETIES — Central, Robin Harris; DeSoto County, L. L. Minor; East Mississippi, T. L. Bennett; Harrison-Stone-Hancock Counties, E. A. Trudeau; Issaquena-Sharkey-Warren Counties.—5.

HOSPITALS.—Mississippi Baptist Hospital, L. W. Long; Vicksburg Sanitarium; Newton Infirmary, Mrs. S. Kemp; Holmes County Community Hospital, R. C. Elmore; Jackson County Hospital, S. B. McIlwain.—5.

OTHERS.—F. J. Underwood, E. F. Howard, D. W. Jones, R. A. Street, Jr., F. M. Smith, Meridian Medical and Surgical Clinic, T. W. Kemmerer.—7.

TOTAL CONTRIBUTORS.—36.

THANK YOU.

BOOK REVIEWS

The Failing Heart of Middle Life: By Albert S. Hyman, A. B., M. D., F. A. C. P., and Aaron E. Parsonnet, M. D., C. M., F. A. C. P., Philadelphia, F. A. Davis Co. 1932. pp. 538.

The first part of the book is devoted to anatomical and physiological factors of the coronary circulation and the etiology and pathology of coronary sclerosis which represents fairly well present day opinion.

In Part II, chapter eight, the authors describe myocarditis due to acute infectious diseases. For the chronic myocardial changes they use the name myocardiosis, which they propose as a designation for coronary and myocardial insufficiency. No real advantage is seen in the use of this term.

Attention is called to the fact that subjective phenomena in early coronary disease outweighs the physical findings. This is not probably always true of the electrocardiographic findings. The statement that the vital capacity test in all of its various modifications presents one of the most valuable objective findings in early myocardial disease would not find sanction by all.

The third part is taken up with coronary thrombosis and occlusion, pain, shock, blood pressure phenomena and other symptoms, prognosis and treatment, covering the subject in a rather complete manner. The statement that the cases of coronary occlusion that show no pain are more likely to occur in the older patients and that they may have marked dyspnea instead, is of some interest. Under prognosis attention is also called to the tendency of the more serious outcome in the apparently mild cases, and is shown by Bramwell to be due to underestimation of the extent of the underlying pathology, such cases being permitted greater latitude as to physical exertion.

Part IV deals with the electrocardiographic changes associated with coronary disease. He states, "The spread of the excitation wave from the time it leaves the sinus node until it reaches the auriculoventricular node of Tarwara is described in electrocardiogram by the P-R interval," this is not wholly correct. The P. R. interval is the time it takes the "excitation" to pass through the auricular muscle, the node and bundle and the beginning of the excitation of the ventricals, represented either by a Q wave or an R.

The authors use the old nomenclature in describing the electrocardiographic changes associated with bundle branch block and only mention the work of Wilson and his co-workers in the introduction.

The chapters on general considerations of angina pectoris, in Part V, represent fairly well present day current opinions; however, there are a few statements that wouldn't go unchallenged. On page four hundred two they say, "We can summarize the relationship between coronary thrombosis and angina pectoris by saying that the two conditions must be regarded separate and distinct entities, the one a purely pathogenic process, the other a physiologic state."

Part VI deals with general legal aspects of sudden death from heart disease.

The opinion of the reviewer is that while there are many statements in this book that cannot be accepted, it may however, be read with profit.

J. M. BAMBER, M. D.

Medical Entomology: By Robert Matheson, Ph. D. Springfield, Ill., Charles C. Thomas. 1932. pp. 489. Price, $5.00.

According to the preface "this introductory text is offered to the physician, the entomologist, the public health worker, the student and the layman in order that it may inform and arouse a keener interest in the problems involved in insect-borne diseases."

This admirable text book or reference work contains information on the morphology, life history, identification, control and disease relationship of all arthropods of medical importance. Photographs of Manson, Ross, Reed, Ricketts, Howard and Comstock, a few of the pioneers in the development of this subject, appear on the frontispiece and add considerably to its interest. A brief historical account of developments in medical entomology is given in the first chapter together with certain problems of insect-borne diseases. Chapters 2-18, inclusive, deal with those Acarina and Hexapoda which are intermediate hosts of human infections or are themselves directly parasitic on man. Chapter 17, on myiasis, calls attention to the surgical uses of maggots in the treatment of osteomyelitis. Chapter 19, on the poisonous and urticating arthropods, includes a discussion of insect allergens as exciting causes of coryza and asthma. Chapter 20 gives a concise account of methods of collecting, preserving, mounting and rearing insects. This chapter is intended for the beginner only. This is followed by a separate author and subject index, the latter being especially carefully prepared and cross referenced. Very conveniently, each chapter is concluded with a well-chosen bibliography and references which have complete bibliographies are starred, thus saving space and being helpful to the reader. The work is profusely illustrated with over 200 figures, two-thirds of which are original and a very large percentage are drawings rather than photographs. These excellent figures alone justify the publication of such a volume and the care with which they have been executed speak for the high calibre of the work as a whole. Usable keys to families, genera and in certain instances, the species are included. In the main, these have been wisely restricted to America and frequently to North America. The majority of the characters used in these keys have been illustrated in the text.

Dr. Matheson's teaching experience has well fitted him for the authorship of a text book on this subject and the present volume leaves little to be desired. As a reference work, the physician, entomologist, research worker, etc., will find an excellent digest of the most recent work. The book should especially appeal to the medical profession since great stress has been placed on the disease relationship of these arthropods with a careful description of the development of the etiological agent in the intermediate host. The reviewer believes that not only the medical practitioner, but those interested in preventive medicine will find concise information on the control of the various arthropods in addition to important epidemiological data. The reader requires no expert training in entomology to find this text useful and with a little time and care might easily acquire facility in recognizing, handling and rearing insects of medical importance.

The author has made a distinct contribution and together with the publisher deserves the highest commendation upon the publication of such a valuable volume. The marked absence of typographic errors is an indication of the careful attention to details with which it has been produced. Those acquainted with the author's "A Handbook of the Mosquitoes of North America" will find that all the groups of arthropods considered, have been dealt with in the same authoritative manner as in the earlier treatise.

E. HAROLD HINMAN, PH. D.

Handbook of the Vaccine Treatment of Chronic Rheumatic Diseases: By H. Warren Crowe, D. M., B. Ch. (Oxon.), M. R. C. S., L. R. C. P. 2nd ed. London, Humphrey Milford, Oxford University Press. 1932. pp. 78. Price, $0.80.

The only changes of note from the previous edition is with regard to dosage of vaccine. Formerly where 500,000 organisms were given the author now advocates starting with 100,000 and this is usually reduced, often ten-fold, three consecutive times. It is urged that polyvalent vaccine always be used, even if an autogenous one can be prepared, as the author holds that the polyvalent type has decided advantages. Treatment is so simplified as to be almost rule of thumb.

The contention is still made that staphlococci are responsible for rheumatoid arthritis and streptococci for the other rheumatic conditions. Sentence structure is very poor and incomplete case reports are jotted down at random.

J. C. BARTON, M. D.

The Children's Tonsils In or Out: By Albert D. Kaiser, M. D. Philadelphia, J. B. Lippincott Co. 1932. pp. 307.

An excellent book well written and easily read, presenting the present day conception of tonsils and adenoids. The author presents the subject matter very systematically, taking up in detail all questions and problems concerning tonsils and adenoids. The fact that several of the chapters on special phases relating to tonsils and adenoids have been contributed by different men who rank high in their chosen fields, enhances the value of the book. The chapters on Anatomy and Physiology, and complications due to the presence of

tonsils and adenoids, are well worth reading. The summary at the end of each chapter helps to emphasize the necessity of complete removal of all lymphoid tissue. In the majority of cases the author deplores the use of electro-therapy and radiation in children, except — highly selected cases—stating that reports of its use in adults is so unconvincing as to merit but little consideration.

F. E. LeJeune, M. D.

Clinical Gynecology: By C. Jeff Miller, M. D. St. Louis, C. V. Mosby Co. 1932. pp. 560. Price, $10.00.

This book is a companion volume to the author's Introduction to Gynecology, and, as is stated in the preface, is designed particularly for the student. The author's extensive clinical experience especially qualifies him for the writing of this text, and his intimate contact with medical students and practitioners over a period of many years makes him thoroughly cognizant of their needs.

It is the function of a reviewer to point out the imperfections of a book, and to make suggestions for its improvement. In this instance, however, the reviewer can find nothing to criticize, and hence can only call attention to the merits of the work. The author's style is most pleasing, and there is no ambiguity in his statements and no uncertainty as to his stand on any question. The important points are in blackface type, so that they leap at one, so to speak, from the printed page. The arrangement of the book is excellent; especial attention is called to the fact that the operative technic is concentrated in a special section, and not scattered throughout the text. The illustrations are most excellent, and leave nothing to be desired.

In a few words, this is a concise, up-to-date, and adequate presentation of the subject, written by an outstanding authority, and will be of great value, not only to the medical student, but to physicians in general practice. Specialists in gynecology as well, will find it a most valuable addition to their libraries.

E. L. King, M. D.

Practical Obstetrics: By P. Brooke Bland. Philadelphia, F. A. Davis Company. 1932. pp. 730.

Every teacher in obstetrics has undoubtedly formed the resolution at one time or another to write a text-book of midwifery which should present the subject according to his own conceptions. Unlike most teachers, Professor Bland has excuted his resolutions in this new volume, Practical Obstetrics for Students and Practitioners. In his preface he states that its purpose is to fill the gap between the standard textbooks and the small manuals, which are often, unfortunately, the sole vade mecum of the embryo accoucheurs. Although a large and vacuous gap does exist between these two, there is some question whether Dr. Bland's book fills it or straddles the interval.

For example, the chapters on the anatomy and physiology of the reproductive tract are excellent, detailed, abreast of the recent findings, and superbly illustrated. A long chapter of 32 pages covers the diagnosis of pregnancy very adequately from a number of different angles, with tables of differential diagnosis that will prove a great aid to the student. A description of the Aschheim-Zondek test, the Friedman modification, and the Mazer-Hoffman test will be a boon to the busy practitioner who has not kept himself familiar with the amazing new developments in this field.

On the other hand, a serious criticism might be made of the chapters on the pathology of pregnancy, the toxemias, and the hemorrhages. The completeness and scholarship which characterized the first part of the book are sacrificed to conciseness. For one who has already studied obstetrics the treatment in this new book represents a delightful summary, but for the student, that is the good one, whose commonest thought is "why"?, and for the practitioner who realizes how seldom one meets text-book cases, recourse must be had to the larger works.

There is an aspect of obstetrics that lies near the field of the gynecologist: abortion and ectopic pregnancy, and instead of the usual cursory attention, Dr. Bland deals with it very satisfactorily. The student will find simple and clear the chapter on the mechanism of labor, particularly the diagrams of the relation of the forces and resistances, and the discussion of the shoulders and the breech. Gratitude must be expressed for the introduction of the term "lie" to settle the arguments on the definition of "presentation."

Dr. Bland leans nearer to the side of the manual in his description of the physiology and conduct of labor, which suffers from an effort at condensation. The contents of the obstetrical bag and the arrangement of the chairs in the home delivery might well be left out. A family with as much furniture as Dr. Bland has indicated will usually be able to afford hospitalization. Again, the exact method of delivering the baby varies with the obstetrician. Many men feel that ironing out the perineum without deep anesthesia is a waste of effort and source of infection under any circumstances. The modified Ritgen technic, which is popular, is not mentioned. The use of the Kielland forceps in the occipito-posterior position is not mentioned in the treatment of this complication. Although these are individual opinions, many obstetricians will find contrary to their own teachings the statement, in discussing the delivery of the aftercoming head: ". . . steady and firm traction in the direction of the birth canal is exerted upon the shoulders."

The element of conciseness is appreciated in the chapters on contracted pelvis; on the other hand, puerperal infection is well presented because of the amplitude of the discussion. Equally good is the chapter on operative obstetrics with the one exception of the subject of induction of labor. The new-born, unfortunately, is not given the mention that he deserves. Although almost every complication and type of therapy is noted, the student and the practitioner are merely stimulated to further reading. Great praise is due for an excellent chapter on Obstetrical Jurisprudence. The volume closes with a large and recent bibliography.

This new book does not eliminate the necessity of our larger text books in teaching obstetrics. On the other hand, although representing the author's personal viewpoint on many subjects that are open to discussion, it is a distinct contribution to obstetrical literature, particularly from a pedagogical point of view.

ARTHUR G. KING, M .D.

The Differential Diagnosis of Endocrine Disorders: By Allan Winter Rowe, M. D. Baltimore, The Williams & Wilkins Company. 1932. pp. 220. Price, $4.00.

This volume represents a collection of the material presented by the author and his associates in various publications in the past decade. During that time over five thousand individuals have been carefully studied by a large group of clinicians and laboratory workers. The author's thesis is that "no one test is competent to establish a diagnosis and each observation derives its true diagnostic significance from its interpretation in terms of all other available information." The present monograph, therefore, covers studies of patients from many points of view, including not only history and physical examination, but all types of laboratory, physiological and psychological tests. While the data presented are interesting, they seem to point in no special direction. The work, therefore, will serve more as a reference for those interested in this field rather than a particularly informative book for the average clinician. The bibliography is arranged by authors alphabetically, rather than by titles, an arrangement which, in the reviewer's opinion, makes it distinctly less useful.

I. I. LEMANN, M. D.

Infants and Children: Their Feedings and Growth: By Frederic H. Bartlett, M. D. New York, Farrar & Rhinehart, Inc. 1932. pp. 424.

This book is one of the most complete of its type. It is in reality a simple text book of pediatrics with most of the stress laid on the management of the well and sick child. It is teeming with practical suggestions.

The first part of the work is devoted to the feeding of infants and children. Any normal child fed according to the directions given should thrive and be free of nutritional disorders and difficulties, which have been the results of fads in infant feeding. This book is quite free from such fads, and gives remarkably complete detailed directions. The advisability of gradual dietary changes is given due attention. Although in the preface and throughout the book it is stated that this work is not intended to supplant the physician's advice, it may do so in the hands of some mothers because of the thoroughness of directions. Any mother who forgets that her infant is an individual with his own problems, and who thinks that the only way of feeding or treating a baby is by the way recommended in this or any other similar publication, should not be given a work of this type to read.

The sections dealing with minor ailments, such as constipation, are excellent. The sections on vomiting are almost complete enough for the physician. The general plan of treating gastro-intestinal upsets and simple diarrheas by the initial partial withdrawal of food is emphasized.

Physicians, nurses, and mothers will probably find that the chapters on the care, training and habits of infants and children are the most beneficial. Good psychology and straightforward, useful suggestions are given.

In the present scheme of the great movement of child hygiene and parental education this work will probably find an important place.

HERBERT B. ROTHSCHILD, M. D.

Diagnosis and Treatment of Postural Defects: By Winthrop Morgan Phelps, B. S., M. D., M. A., F. A. C. S., and Robert J. H. Kiphuth. Springfield, Ill., Charles C. Thomas. 1932. pp. 180.

In response to the growing interest in body mechanics and correction of postural deformities, the authors have presented their observations in a most interesting book.

They trace the effect of gravity on the quadruped as he assumed the upright position and they show that postural weakness is due to the effect of gravity on the vertical position. The additional influences of environment and habit are shown to have a direct bearing upon the static normality or deformity of the individual.

The authors enter into an excellent discussion of the correct carriage and the importance of abnormalities other than of the spine, as factors in the production of an abnormal posture. Structural changes of the mild type are clearly considered, and it is in this section that the reader is struck with the excellence of the work. The investigation of functional asymmetry as a cause of improper body mechanics is also considered.

Another valuable portion of this book is the chapter devoted to corrective exercises. It has long been held that in the treatment of improper posture, certain physical exercises be prescribed. This has been left in the hands of physical culturist, dancing teachers and others and because of the unsatisfactory results we have allowed corrective therapy to languish and have fastened our attention on retentive devices in the vain hope of inducing correction of faulty posture by belts, braces, etc.

It is in this final chapter that the corrective exercises are given, illustrated, not by diagram but by photographs, showing the right and wrong positions, and explaining the loss of stretching resulting from the incorrect position.

Such a work as this will prove its value in the field of physical education, pediatrics and orthopedics and these observations on this important subject will be well received by the medical profession as a whole. When we become cognizant of the important role that incorrect posture plays in many functional conditions and the methods of correction of these static deformities we will have gone a long way toward reducing these disabling conditions.

DUDLEY M. STEWART, M. D.

Diabetes in Childhood and Adolescence: By Priscilla White, M. D. Philadelphia, Lea & Febiger. 1932. pp. 237. Price, $3.75.

In 1922, Priscilla White was a student at Tufts College Medical School. She caught the eye of Dr. Elliot Joslin while she was doing metabolisms for Dr. Labrey. He could not help noticing this early rising young women who after the tedium of two hours work from 5 A. M. to 7 A. M. still evidenced enough interest and energy to study and entertain his diabetic children before going to her classes. Since her graduation, save for one year, she has virtually lived with Dr. Joslin's younger diabetics. Ten years of constant observations and experiments on a group of patients, who are probably the best controlled in the world, are her qualifications for writing this monograph. In no degree comparable to the masterpiece of her preceptor it is a splendid contribution which with frequent revisions will become increasingly valuable.

With the advent of insulin the horizon of the juvenile diabetic brightened, children who lived a few days or a few months now live to indefinite periods, and because no diabetic child ever lived so long before, they have become explorers of uncharted seas. In the study of the juvenile diabetic therefore the solutions of many unsolved problems may be found. Dr. White's presentation is logical and consists of the analysis of a wealth of facts. Unfortunately the chapter on heredity which was calculated to be her piece de resistance savors of speculation and fancy and she will probably be accused of figure juggling by the hypercritical. Stating that diabetes can be demonstrated to be transmitted as a simple Mendelian recessive if the efficiency of diagnosis is 82 per cent efficient (an arbitrary figure), she advises against the union of two homozygous diabetics since all the offsprings will eventually develop diabetes. The union of a homozygous diabetic with a heterozygous non-diabetic should result in equal numbers of children developing and not developing diabetes. When both parents are heterozygous non-diabetics one quarter of the offspring should develop the disease. If a homozygous diabetic marries a pure homozygous diabetic then one of the children should develop diabetes. Such conclusions on the basis of her data are open to criticism, on the grounds that she uses a segregating population, arbitrarily chooses 82 per cent correctness of diagnosis and applies the laws of chance to statistics. Also, it is impossible to calculate the number of non-segregating families in which the types of mating is heterozygous non-diabetic inter *se*.

Too meagre is the treatment of behavioristic problems in the diabetic child. This important phase of the subject certainly merits at least a chapter.

Except for the above two objections Dr. White's book is brilliant. Interesting indeed are the photographic illustrations and Figure 22, p. 203, should win a grand prix. It is a picture of a little girl aged two years and eleven months, injecting her own insulin.

MAURICE SULLIVAN, M. D.

PUBLICATIONS RECEIVED

Charles C. Thomas, Springfield: A Textbook of Surgery, by John Homans, M. D. Chapters in American Obstetrics, by Herbert Thoms, M. D. The History of Dermatology, by W. Allen Pusey, A. M., M. D., L. L. D. Pituitary Body, Hypothalamus and Parasympathetic Nervous System, by Harvey Cushing.

The Macmilan Company, New York: A General History of Nursing, by Lucy Ridgely Seymer, M. A., S. R. N.

The Williams & Wilkins Company, Baltimore: Sex and Internal Secretions, by Edgar Allen.

J. B. Lippincott, Philadelphia: Office Surgery, by Fenwick Beekman, M. D.

W. W. Norton & Company, Inc., New York: The Physical Basis of Personality, by Charles R. Stockard.

Emerson Books, Inc., New York: The Sex Technic in Marriage, by Isabel Emslie Hutton, M. D.

The Rockefeller Foundation, New York: Methods and Problems of Medical Education (Twenty-first Series).